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ABSTRACT

This report includes the application for validation, the state review form, and the on-site validation form for a demonstration center based on a computer-managed system of reading instruction. The project seeks to provide locally constructed diagnostic tests, computer-indexed teaching materials, criterion-referenced tests, and periodic summaries of progress for individual students, classes, and schools. The first and second years of the project were used for development and field testing of the various components; the third year was used to implement the program and to investigate its effectiveness. Results from a comparison of 196 pupils from grades 3, 4, 7, and 9 with 143 pupils in control groups are reported for student achievement and attitude as measured by locally developed tests. Changes in teacher competence and attitude are reported for 18 teachers who participated in an inservice training course needed to implement the program. (AA)

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VALIDATION REPORT

Individualized Reading Instruction for Students

Computer - Managed Reading System

E.S.E.A. TITLE III

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I.R.I.S.
PROGRESS REPORT

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CS 002 828

TABLE OF CONTENTS

SECTION I Application for Validation

Part I .... Information and Project Description
Part II .... Effectiveness/Success
Part III .... Resource Specifications
Part IV .... Exportability
Part V .... Appendix

SECTION II State Review and Rating Form

Part I .... Review of Application for Validation
Part II .... Review and Rating of Evidence of Effectiveness/Success
Part III .... Review of Resource Specifications
Part IV .... Review and Rating of Evidence of Exportability
Part V .... State Educational Agency Selection Form

SECTION III On-Site Validation Form

Part I .... Validation of Information and Project Description
Part II .... Validation of Evidence on Effectiveness/Success
Part III .... Validation of Evidence on Resource Specifications
Part IV .... Validation of Evidence on Exportability

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SECTION IV Validation Report

Part I .... Project Information and Description

Part II .... Conclusions and Recommendations

Part III .... Statement of the innovativeness of the Project

Part IV .... Attachments of reports and certifications

PART I--Information and Project Description

Part I of this application can serve several purposes: (1) as the IVD project abstract and (2) as a report that may be submitted to the Dissemination Review Panel

A. PROJECT INFORMATION

Area of concern Reading
(e.g., Career Education, Handicapped, Reading, etc.)

Project Title Individualized Reading Instruction for Students (IRIS)

Project Director's Name Walter B. Gatlin

P. O. Box 1230 Alexandria Louisiana 71301
Address City State Zip Code

Phone Number (include area code) (318) 442-8891

Application Agency Rapides Parish School Board

Location Sixth and Beauregard Streets
(Street Address)

Alexandria Louisiana 71301
City State Zip Code

Superintendent's Name E. A. Nichols

P. O. Box 1230 Alexandria Louisiana 71301
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Phone Number (include area code) (318) 442-1301

Project Period: beginning 7-1-72 (date); ending 6-30-75 (date)

Expenditures

Grant Period			Federal Funds	Other Funds	Total Funds
7-1-72	to	6-30-73	$ 131,546.00	$	$
7-1-73	to	6-30-74	$ 120,860.73	$	$
7-1-74	to	6-30-75	$ 129,692.51	$	$
	to		$	$	$
		TOTAL	$ 382,099.24	$	$

PART I - Information and Project Description

B. BRIEF DESCRIPTION OF THE PROJECT:

Goals and Objectives:

The Individualized Reading Instruction for Students Project goals are:

(1) To develop a computer managed instructional program in selected areas of reading to facilitate the achievement of students in reading by providing approaches to reading that are varied, effective, and interesting.

(2) To provide a system of instruction utilizing materials and activities available to the teacher and to affect the role of the teachers in reading instruction.

The purpose of the IRIS project is to promote the personalization of reading instruction by providing thorough means of diagnosing needs with locally constructed graded diagnostic tests, locating materials for treatment with a computer-developed graded materials retrieval manual, evaluating achievements with locally constructed graded criterion referenced tests and monitoring progress of individual students, classes, and schools through periodic computer summaries. Educational prescriptions pertaining to known and identified reading problems are written according to individual student needs. These prescriptions will indicate methods of correction for simple and specific reading problems and will include materials and procedures to be used in treatment.

A major aim of "IRIS" is to provide personalized reading instruction whereby a student can compete with himself in reading achievement rather than with others. The project seeks to develop student self-direction in a learning environment which presents flexibility at each level of the learning process.

The program has been completely systematized around performance objectives. There have been extensive objectives governing the management phase, the developmental phase, and the implementation phase. In this the third year of the project, where implementation has occurred, the project is built around these four objectives:

(1) Students in grades 3, 4, 7, and 9 who participate in the IRIS program will score significantly higher (.05 level) in selected reading skills and competencies than will non-participants when measured by the following locally constructed tests:

Diagnostic Test, Phonic Analysis, Level I
Diagnostic Test, Phonic Analysis, Level II
Diagnostic Test, Structural Analysis

(2) Students in grades 3, 4, 7, and 9 who participate in the IRIS program will demonstrate a significantly greater (.05 level) gain in attitude toward selected reading concepts than control group students as measured by the Semantic Differential.

(3) Teachers participating in the in-service education program for the IRIS project will demonstrate a significant gain (.05 level) in selected reading skills and knowledge as demonstrated by a pretest - posttest assessment using the Performance Competency Self Assessment for In-Service Education.

(4) Teachers participating in the IRIS program will show a significant increase (.05 level) in attitude toward use of the basic components of the IRIS Reading Kit as measured by the Teacher Appraisal of the IRIS Reading Kit.

Context:

Rapides Parish, located in the central part of Louisiana, has a population of approximately 118,078 of which 30,078 are school age children. Enrolled in its 52 public schools are 17,354 white children and 9,528 black children. There are 1,914 students enrolled in the four parochial schools. In four private schools - England Air Force Base, Alexandria Country Day School, Hope Baptist School and South Rapides Academy - there are 1,203 students enrolled. Three institutions of higher learning serve the parish. They are Louisiana State University at Alexandria; Northwestern State University, Natchitoches; and Louisiana College, Pineville.

The 1,369 square mile parish is separated by Red River with pine wooded hills on the north, and flat fertile farm land to the south.

Primary sources of income in the parish are derived from forestry, agriculture, industry, and retail business. The major industries now in the area are Dresser Industrial Valve and Instrument Division, and Pineville Kraft Corporation, Proctor and Gamble, and Parks Wood Products. The per capita income of the parish as recorded in 1970 was $2,609. Information from the Employment Security Department indicates an unemployment rate in the area of 8% to 12%.

The Rapides Parish School System is organized on a basic 6-2-4 system. Elementary Schools contain K-6, Junior High Schools contain grades 7-8, and Senior High Schools 9-12.

Students in the IRIS project are from both rural and urban areas. Involved in the project are students from grades 3, 4, 7, and 9, from all income levels and representative ethnic groups.

An assessment of needs survey conducted in the Spring of 1972 revealed the greatest educational need of students in the Rapides Parish School System to be in the area of reading. In assessing the needs of the system an analysis of needs was distributed to:

(1) Rapides Parish Public and Parochial School Board members

(2) ESEA Advisory Committee members

(3) Rapides Parish School Board administrative supervisory staff members

(4) Public and parochial school principals

(5) drop-outs enrolled in a work incentive class at the Rapides Parish Skill Center

Included in the assessment were random sampling of teachers in public and parochial schools, seniors in public and parochial schools, and parents whose children attend public and parochial schools.

Also included in the assessment of needs was a summary of attendance data showing increasing absences from the lower to upper grades.

Eighteen activities were included on the assessment form. The final ranking of activities showed reading to be the top priority with 5.385 rating. This priority rating clearly demonstrated that those surveyed felt reading to be the number one need for improvement in the parish school system. S.R.A. and I.T.E.D. achievement tests administered in the Rapides Parish School System in 1971-72 further revealed that 30% of all students in Rapides Parish grades 2 - 6 in Title I and non Title I schools scored below the 25th percentile ranking in reading achievement. The same survey also revealed that 26% of those students in grades 7 - 11 ranked below the 25th percentile in reading achievement.

A further review of reading scores from this survey showed that the overall parish system average in reading achievement was at approximately the 32nd percentile on the national norm scale. Locally developed reading diagnostic tests given to students in the Rapides Parish School System and other available reports and studies have documented the fact that many students in Rapides Parish Schools lack basic skills necessary to be competent readers.

Program Description:

Individualized Reading Instruction for Students (IRIS) is a computer-managed reading project based on diagnosis - prescription - treatment - post criterion-referenced testing. Data processing is utilized to assist teachers in the management of the reading program in the following ways:

(1) Set up data banks of student information

(2) Make available to teachers a wide variety of reading skills by coding, storing, and organizing descriptive information about small units of material

(3) Print out individual student progress reports

(4) Provide summary reports of effectiveness of instruction and instructional materials in treatment of specific reading deficiencies

(5) Prepare individual student prescriptions for instruction

The project was funded for a three year period from July 1, 1972 to June 30, 1975. The first and second year of the project was used for development and field testing of the various components of the project. The third year has been used for implementation of the project around a research design.

There are seven schools, five public and two parochial, participating in the project. Grades two through ten have been involved in the project development. Approximately 1,000 students have been involved in the development of the project over the past three years. Approximately 339 students are involved in the third year experimental phase with 196 in experimental groups and 143 in control groups. The distribution of the target population is as follows:

GRADE LEVEL	STUDENT PARTICIPANTS FOR ONE YEAR	STUDENT PARTICIPANTS FOR 2 OR MORE YEARS
3	31	
4	18	18
7	36	10
9	70	13
	TOTAL 155	TOTAL 41

The project has a staff of four persons - one full time director, one reading specialist and project coordinator, one secretary to the director, and a clerical aide. There are 7 principals, 25 teachers, and 7 teacher aides involved at the school and classroom level. Of the 25 teachers working in the project, teaching experience ranges from 3 to 34 years with 16 having their masters and above. All teachers hold a valid teaching certificate in their respective fields.

Consultants on the University level included Dr. Otis Cox* Director of Research at Northwestern State University of Lousiana; and Dr. Mildred Bailey* Director of Reading at Northwestern State University. Local consultants involved directly in the development of project materials included teachers working in the project at the classroom level and Mrs. Georgie Duncan, a retired teacher with the Rapides Parish School System. The project focus during the two years of development and field testing and the last year of implementation under the experimental design has been on students who were identified as reading below their actual reading grade placement on a standardized reading test. These students were diagnosed for specific skills deficiencies in Phonic and Structural Analysis with locally constructed graded diagnostic tests.

* Resumes are included in the appendix

Three diagnostic tests were constructed by the Title III staff and project teachers, two in Phonic Analysis (grades 2 - 4 and grades 5 - 10) and one in Structural Analysis (grades 4 - 10). These tests were submitted to statistical analysis in order to determine an estimate of their effectiveness. Each test was developed with an acceptable standard for successful performance for each subtest. This standard is essential for use of the test by the teacher to determine skills in which the student is deficient.

A period of treatment follows diagnosis. Educational prescriptions pertaining to known and identified reading problems of individual students are written. A computer based materials retrieval manual is used by teachers to develop these prescriptions. These graded materials retrieval manuals developed by the computer are more than just a teacher guide. They include:

(1) Complete performance objectives for the skills of reading

(2) Complete identification of numerous reading materials associated with each skill and exact location within the material

(3) Rated levels of materials

(4) Degree of involvement for teachers for each set of materials

(5) Sensory mode involved for instructional material

Thus the teacher is free of much detail and will become an organized manager of the learning laboratory. The teacher refers to the retrieval manual kit and selects materials for each skill that are most appropriate to particular learner needs.

An evaluation at the end of treatment is used for the purpose of determining whether the specific skills deficiencies have been corrected. Graded locally constructed criterion-referenced tests have been constructed in each skills area on three levels to evaluate the progress a student has made. An acceptable level has been established to determine whether the student has mastered the skills or needs to be recycled for additional treatment.

Monitoring forms are included in the lab to track skill growth of individual students or groups, for instructional planning, and for transmitting information to data processing. These include:

(1) Wall charts on Phonic and Structural Analysis for monitoring individual progress

(2) Individual prescription forms to evaluate and monitor success of educational materials used in treatment

Extensive in-service programs were initiated for Title III staff, teachers, aides, and principals to lend guidance in exposing them to new and innovative methods of instruction. Workshops were held in the areas of testing, evaluation, materials, and performance based individualized instruction. Through active experimentation with new media and techniques, teachers developed new skills and returned to their classrooms with fresh ideas about methods and materials to fit their own teaching situations.

The producer staff has completed the Vocabulary section of the IRIS lab and is field testing the components in Title III classroom situations during the spring semester of 1975. This section of the project will be incorporated into the IRIS reading management system in the 1975-76 school year.

The Vocabulary section has been constructed around the general format of the other sections of the IRIS project. This section is somewhat different, however, in that it has been designed basically for those students who are identified from prior reading achievement tests as reading on or above their actual grade placement. In selected cases it can be used in remedial instruction for those students identified as being below their actual reading grade placement in vocabulary or comprehension.

The Vocabulary diagnostic tests measure the degree to which students in grades 2 - 12 have mastered various vocabulary skills. They have been constructed at three levels:

(1) Vocabulary - Level I (Primary)
Reading Levels 2 - 4

(2) Vocabulary - Level II (Intermediate)
Reading Levels 5 - 8

(3) Vocabulary - Level III (Jr. High-Secondary)
Reading Levels 7 - 12

Costs of the Vocabulary section can be estimated by examining the cost of related components in the phonic and structural analysis sections.

The producer staff is presently defining areas of comprehension to be included in a fourth section of the IRIS lab, identifying specific skills within each area, and writing performance based objectives for instructional management. It is hoped by the producer staff that a continuation of development in comprehension will be possible so that this section might be added to the reading system making it more comprehensive and complete.

Costs:

For consideration of adoption of the IRIS Reading Management System the producer staff has developed four (4) options. Costs are estimated on the basis of twelve teachers serving 300 students.

Option I - Consumer district owns or has a computer in its present operations.

Total initial implementation Cost - $ 2,552.00
Per pupil implementation Cost - $ 8.51

Total ongoing maintenance Cost - $16,903.00
Per pupil ongoing maintenance Cost- $ 56.34

Option II - Consumer district rents or contracts computer services.

Total initial implementation Cost - $ 2,830.00
Per pupil implementation Cost - $ 10.43

Total ongoing maintenance Cost - $17,721.00
Per pupil maintenance Cost - $ 59.07

Option III - The consumer district does not use computer services for implementing the IRIS program.

Total initial implementation Cost - $ 2,456.28
Per pupil implementation Cost - $ 8.19

Total ongoing maintenance Cost - $16,731.00
Per pupil maintenance Cost - $ 55.77

Option IV - Consumer district adopts only the project developed diagnostic and criterion-referenced testing portion of the program.

Total initial implementation Cost	- $1,487.24
Per pupil implementation Cost	- $ 4.96
Total ongoing maintenance Cost	- $4,281.00
Per pupil maintenance Cost	- $ 14.27

C. EVIDENCE OF EFFECTIVENESS:

The evaluation of the project was conducted by Dr. Otis Cox of Northwestern State University with the assistance of the IRIS staff. Data were analyzed with the use of an Olivetti Programma 101 programmed electronic calculator and with the services of the local computer, a Univac Model 9300.

The evaluation was conducted in terms of four objectives. These objectives concerned, in order:

1. Student achievement
2. Student attitude
3. Teacher competency
4. Teacher attitude

The samples of students used to conduct the study included 339 students. Of these, 196 were enrolled in the experimental groups while 143 were enrolled in the control group. All of the eighteen teachers who participated in the in-service program comprised the sample for the study of teacher change.

The results were statistically analyzed for each of the objectives. The summarized results of these analyses follow:

Objective I: The differences in achievement groups were tested for statistical significance using analysis of covariance procedures. The experimental and control groups were matched on selected variables. The pretest scores were used as the covariate in the analysis of covariance procedures. In all three areas tested (Structural Analysis, Phonic Analysis, Level I, and Phonic Analysis, Level II), statistically significant differences were obtained. In all cases an analysis of the adjusted mean scores revealed that each of the experimental groups scored higher than the control group. Multiple comparisons as well as supplementary statistical analyses are reported under Objective I in Part II of this report.

Objective II: An assessment of the attitudes of the experimental and control students was obtained by use of the semantic differential. A total of seventeen separate reading concepts were rated by each student in a pretest, posttest design. Pretest scores were subtracted from posttest scores and the differences (or amount of gain/loss) in attitude scores were used to test for significance. Analysis of the total gain/loss showed statistical significance relative to the experimental students. Experimental students made a substantial mean gain in attitude score while the control group students showed a mean loss in attitude toward reading concepts. A supplementary analysis by the separate reading concepts is also provided for further evaluation.

Objective III: The in-service program was designed to improve teachers' skills and knowledge competencies in a wide variety of approaches to reading. The teachers were assessed before the in-service program and upon completion of the activities. The gain in skill/knowledge from pre to post assessment was tested for statistical significance using the chi-square technique. The results for each area of skills/knowledge were significant. The gains that were sought by the staff through the in-service program were achieved.

Objective IV: One of the desired results of the program was to have the teachers become more favorably disposed toward using the instructional kit. The teachers were assessed, pre and post, using a rating scale for each of the three (3) basic components of the kit, the diagnostic tests, the retrieval manual, and the criterion-referenced tests. The Friedman two-way analysis of variance of Ranks technique was used to test significance. The results of all three (3) tests showed significance at the .001 level indicating teacher attitude change in the desired direction.

The changes described above are attributed to the program activities. The student achievement and gains are meaningful in terms of control group comparisons.

Teacher gains are attributed to the program activities. Pre - post assessment identified that the change occurred during the time of the program. If these teachers had continued in the regular program, they would not have been exposed to the training program that comprised the in-service course. Also, only by working with materials could they have gained insight into the value of these materials to the classroom teacher.

D. EVIDENCE OF RESOURCE SPECIFICATIONS:

For consideration of adoption of the IRIS Reading Management System, the producer staff has developed four (4) options. A resource specifications section has been provided for each option. The unit of intervention used by the producer in developing resource specifications is 12 IRIS Labs, 12 teachers serving 300 students, three hours a day for 180 days.

Option I - The consumer district owns or has a computer in its present operations. The start-up cost including in-service training for 12 teachers, 12 sets of project materials for 12 teachers serving 300 students, data processing materials and services, and consultant services totals $2,552.00 or $8.51 per student. The management cost including materials and services for monitoring the reading system totals $3,600.00 or $12.00 per student. Operational cost totals $13,303.00 or $44.34 per student.

Option II - The consumer district rents a computer or contracts computer services. This start-up cost including in-service training for 12 teachers, 12 sets of project materials for 12 teachers serving 300 students, data processing contracted services, and consultant services totals $2,830.00 or $10.43 per student. The management costs total $4,350.00 or $14.50 per student. Operational cost totals $13,371.00 or $44.57 per student.

Option III - The consumer district does not use computer services for implementing the IRIS Reading System. The basic differences involved are commercial printing of existing materials retrieval manuals and consumer district's development of a monitoring system for the program.

Start-up cost including in-service training for 12 teachers, 12 sets of project materials for 12 teachers serving 300 students, and consultant services totals $2,456.28 or $8.19 per student. The management costs total $3,600.00 or $12.00 per student. Operational cost totals $13,131.00 or $43.77 per student.

Option IV - The consumer district adopts only the project developed diagnostic and criterion-referenced testing portion of the program. Start-up cost including in-service training for 12 teachers, 12 sets of project developed diagnostic and criterion-referenced tests, and consultant services total $1,487.24 or $4.96 per student. The management cost totals $1,875.00 or $6.25 per student. Operational cost totals $2,406.00 or $8.02 per student.

The afore mentioned information provided reflects the cost factors involved for adopter schools depending upon the sophistication and/or financial limitation of the school district. The Options for adoption are so designed as to not prohibit any school district for the utilization of the philosophy and/or practices as specified throughout the project.

E. EVIDENCE OF PROJECT EXPORTABILITY:

The highly exportable nature of Project: IRIS is underscored by the universal need for enhanced reading achievement. A Louisiana state needs assessment as well as the Rapides Parish survey of educational need identifies reading as the top priority among the most critical areas of curriculum concern in Louisiana. Further evidence of the exportability of Project: IRIS is indicated by the numerous requests for project developed material from school districts across the state and in other states.

The Rapides Parish School Board plans to continue the IRIS Reading Management System in the parish after federal funding is ended and agrees to operate a project demonstration site. Title I is adopting the IRIS program for the next school year. It will be implemented in 26 of the 52 schools and will reach 4,500 students.

Most potential consumer school districts will probably have the personnel and physical facilities necessary to replicate the IRIS Reading Management System. It is recommended, however, that a half-time coordinator from the adopting school district be responsible for administering the project with each twelve teachers. Likewise the support of one classroom aide for each three or four teachers appears to be needed. The program can be used with any existing school organization and is compatible with self-contained classroom situation as well as reading laboratory settings.

The project staff has developed the IRIS project around four (4) options for consideration of consumer school districts in adopting the IRIS Reading Management System. They are as follows:

Option I - This adoption will be for those school districts owning or having a computer as part of their existing programs. All phases of the reading management system are included.

(1) In-service training for all personnel involved in the program

(2) Project developed graded diagnostic tests to identify reading skill deficiencies

(3) Project developed graded criterion-referenced tests to evaluate students after treatment

(4) Materials retrieval manuals to select materials for skills that are the most appropriate to particular learner needs

(5) a monitoring system to provide valuable information about individual students and allow the teacher to become an organized manager of the reading program in the classroom

(6) Data Processing object programs, instructions, and data tapes to develop and manage the reading system

Option II - The basic difference between option I and option II is that the consumer district in option II does not have a computer and must rent a computer, or contract data processing operations.

Option III - This option allows the consumer district to adopt the reading management system without the use of a computer. The basic difference in this option is that the consumer uses a commercial reprinting of the existing materials retrieval manuals and the consumer district must develop and maintain the monitoring system of the program for management purposes. All components of the project otherwise are the same.

Option IV - This option involves a school district adopting only the project developed graded diagnostic and criterion-referenced testing components and associated forms. The Validation Team does not recommend this option since so many of the essential elements of the program will be eliminated in the use of only testing components.

All costs of every component of each option are included in the exportability section.

F. LOCALLY DESIGNED PUBLICATIONS AND MATERIALS:

Title	Description	Cost
Preparation of Behavioral Objectives	Booklet defining behavioral objectives and practice exercises in writing objectives	$ .25 per copy
Instructional Manual for "IRIS" Lab	Gives detailed explanation of components of Lab and use of each	$ 3.98 per copy
Phonic Analysis Manual of Instructions - Level I	Gives instructions for administration of Phonic Test with validity and reliability statistics	$ 4.31 per copy
Phonic Analysis Manual of Instructions - Level II	Same	$ 4.31 per copy
Structural Analysis Manual of Instructions	Gives instructions for administration of Structural test with validity and reliability scores	$ 4.31 per copy
Phonic Analysis - Diagnostic Test - Level I	Student test to diagnose deficiencies in Phonics Grades 2 - 4	$ .22 per copy
Phonic Analysis - Diagnostic Test - Level II	Student test to diagnose deficiencies in Phonics Grades 5 - 10	$ .22 per copy
Structural Analysis - Diagnostic test	Student test to diagnose deficiencies in Structural Analysis - Grades 4 - 10	$ .19 per copy
Phonic Analysis Criterion referenced tests - Level I Grade Level 2 - 4	24 tests (Pads of 25) Teacher score sheets Dividers	$ 17.75 per set
Phonic Analysis Criterion referenced tests - Level II Grade level 5 - 6	20 sets (Pads of 25) Teacher score sheets Dividers	$ 17.63 per set

Title	Description	Cost
Phonic Analysis Criterion referenced tests - Level III Grade levels 7 - 12	20 sets (Pads of 25) Teacher score sheets Dividers	$ 17.63 per set
Structural Analysis Criterion referenced tests Level I Grade level 2 - 4	14 tests (Pads of 25) Teacher score sheets Dividers	$ 11.98 per set
Structural Analysis Criterion referenced tests Level II Grade level 5 - 6	14 tests (Pads of 25) Teacher score sheets Dividers	$ 11.98 per set
Structural Analysis Criterion referenced tests Level III Grade level 7-12	14 tests (Pads of 25) Teacher score sheets Dividers	$ 11.98 per set
Individual Prescription forms	Forms to write individual student prescriptions for treatment of identified phonetic and structural skills deficiencies. Information includes: performance objective date of treatment materials location teacher evaluation of material criterion referenced test taken after treatment degree of success on criterion test (Pads of 50)	$ .48 per pad
Object programs and Instructions for Computer	Computer programs for IRIS Reading System	$115.00
Data Tape	Rapides Parish materials retrieval manuals	$115.00
Monitoring Reports	Summaries of student achievement, materials evaluation, classes, schools, etc.	Part of computer programs

Title	Description	Cost
Phonic Analysis Progress Chart	To track student deficiencies in Phonic skills from diagnostic tests and recording evaluation after criterion testing.	$ .90 per chart
Structural Analysis Progress Chart	To track student deficiencies in Structural skills from diagnostic tests and recording evaluation after criterion testing.	$ .65 per chart
Materials Retrieval Manual (Phonic and Structural) Level I - Grades K-4 Level II - Grades 3-6 Level III - Grades 6-12	Computer designed manuals for location of reading materials to treat specific and identified phonic and structural reading deficiencies. Information is cataloged by: objective location degree of teacher participation media sensory mode, etc.	(1) Districts with computer $15.00 per 3 levels * (2) Districts renting or contracting a computer $90.00 per 3 levels * (3) Commercial reprinting of existing manuals $126.73 per 3 levels

G. UNANTICIPATED OUTCOMES AND SPINOFF FINDINGS:

1. Increased accountability
2. Materials assessment
3. New means of reporting student progress
4. Increased motivation in students when they see their progress charted
5. Adaptability to other disciplines

* after initial printing

PART II--Effectiveness/Success

Project objective(s) identified for validation have been attained and the performance of the learner has been improved.

Directions: Evidence on effectiveness/success is to be reported by objective. Part II has 15 items. Respond to all 15 items for each nominated objective. You will need as many sets of Part II blank forms as you have objectives.

Only major objectives should be presented for validation. List these objectives below. Number consecutively. The handbook contains only one set of forms. Reproduce as many sets of forms as you need.

A major objective represents a central or primary goal of the project which will be reflected in the amount of effort, project staff time, funds expended and anticipated behavior outcome. Ordinarily the major objectives will be limited to two or three for each project and will reflect student learner outcomes.

1. Students in grades 3, 4, 7, and 9 who participate in the IRIS program will score significantly higher (.05 level) in selected reading skills and competencies than will non-participants when measured by the following locally constructed tests:

    Diagnostic Test, Phonic Analysis, Level I
    Diagnostic Test, Phonic Analysis, Level II
    Diagnostic Test, Structural Anlaysis

2. Students in grades 3, 4, 7, and 9 who participate in the IRIS program will demonstrate a significantly greater (.05 level) gain in attitude toward selected reading concepts than control group students as measured by the Semantic Differential.

3. Teachers participating in the in-service education program for the IRIS project will demonstrate a significant gain (.05 level) in selected reading skills and knowledge as demonstrated by a pretest-posttest assessment using the Performance Competency Self-Assessment for In-service Education.

4. Teachers participating in the IRIS program will show a significant increase (.05 level) in attitude toward use of the basic components of the IRIS Reading Kit as measured by the Teacher Appraisal of the IRIS Reading Kit.

PART II-- Effectiveness/Success (cont.)

Objective No. 1

1. State each major objective to be validated on a separate set of Part II, Effectiveness/Success, forms. Number each objective for identification. From here on, identify the objective by its assigned number. You will need as many sets of Part II forms as there are objectives to be validated.

   Objectives should be stated in measurable terms reflecting who, upon completion of the project intervention (treatment), will be able to do what at what level of performance. Any objective not meeting the necessary specifications of measurability will be eliminated from further review, investigation and validation.

   State Objective:

   Students in grades 3, 4, 7, and 9 who participate in the IRIS program will score significantly higher (.05 level) in selected reading skills and competencies than will non-participants when measured by the following locally constructed tests:

   Diagnostic Test, Phonic Analysis, Level I
   Diagnostic Test, Phonic Analysis, Level II
   Diagnostic Test, Structural Analysis

PART II--Effectiveness/Success (cont.)

Objective No. 1

2. Provide evidence to justify the need for the objective under consideration by describing the needs assessment procedures and the related findings.

A direct relationship should exist between the identified needs and the anticipated behaviorial change defined by the major project objectives.

Description of needs assessment and findings:

An assessment of perceived needs conducted in the Spring of 1972 revealed the greatest educational need of students in the Rapides Parish School System to be in the area of reading. In assessing the needs of the system a rating scale was distributed to:

(1) Rapides Parish Public and Parochial School Board members

(2) ESEA Advisory Committee members

(3) Rapides Parish School Board administrative supervisory staff members

(4) Public and parochial school principals

(5) Drop-outs enrolled in a work incentive class at the Rapides Parish Skill Center

Included in the assessment were random sampling of the opinions of teachers in public and parochial schools, seniors in public and parochial schools, and parents whose children attend public and parochial schools.

Also included in the assessment of needs was a summary of attendance data showing increased absences from the lower to upper grades.

Eighteen activities were included on the assessment form. The final ranking of activities showed reading to be the top priority with a 5.385 rating. This priority rating demonstrated that those surveyed felt reading to be the number one need for improvement in the Parish school system. S.R.A. and I.T.E.D. achievement tests administered in the Rapides Parish School System in 1971-72 further revealed that 30% of all students in Rapides Parish grades 2 - 6 in Title I and non-Title I schools scored below the 25th percentile in reading achievement. The same survey also revealed that 26% of those students in grades 7 - 11 ranked below the 25th percentile in reading achievement.

A further review of reading scores from this survey showed that the overall Parish system average in reading achievement was at approximately the 32nd percentile on the national norm scale. Locally developed reading diagnostic tests given to students in Rapides Parish School System, ESEA Title I Assessment Needs, 1973, and Louisiana State Reading Assessment, 1973, have documented the fact that many students in Rapides Parish Schools lack basic skills necessary to be competent readers.

The following tables give information concerning the needs assessment and achievement scores:

ASSESSMENT OF NEEDS
LIST OF GROUPS SURVEYED

NAME OF GROUP	NUMBER SURVEYS SENT	RETURNED
Parents	200	200
Students	200	200
Teachers	200	200
Principals (Public and Private)	55	48
Administrative and Supervisory Staff (Public and Private)	29	21
School Board Members	18	6
ESEA Advisory Committee Members	14	7
Drop-outs	34	34

ASSESSMENT OF NEEDS
FINAL ACTIVITY PRIORITY FORM

Activity	Final Priority Rating
English - Reading	5.385
Special Activities for Handicapped	5.215
Mathematics	5.205
Natural Science	5.095
English - Other Language Arts	4.765
Pre-Kindergarten - Kindergarten	4.385
Business Education	4.075
Physical Education	4.050
Home Economics	4.000
Social Studies	3.945
Other Instructional Activities	3.560
English-Speech	3.525
Foreign Language	2.765
Art	2.675
Cultural Enrichment	2.660
English as a Second Language	2.660
Industrial Arts	2.000
Other Vocational Education	1.865

26C
(Obj. 1)

SUMMARY OF TEST SCORES
SRA AND ITED ACHIEVEMENT SERIES

Title I Schools — Reading

Grade	1969-70			1970-71			1971-72		
	Enrollment	1-25 %tile	26-49 %tile	Enrollment	1-25 %tile	26-49 %tile	Enrollment	1-25 %tile	26-49 %tile
2	1333	508	311	1233	391	305	1655	525	395
3	1361	385	380	1240	446	185	1642	433	530
4	1293	341	301	1112	342	254	1749	420	506
5	1277	409	324	950	301	235	1728	591	446
6	1204	434	189	852	222	185	1683	501	399
1-6 Totals	6468	2077	1505	5387	1663	1164	8457	2470	2276
%		32	23		31	32		29	27
7	1582	486	305	1367	397	325	1497	398	349
8	1451	370	386	1243	375	274	1331	350	302
9	962	284	203	746	221	166	1268	413	336
10	860	243	193	698	151	172	1004	330	267
11	724	221	128	647	186	134	884	304	167
7-11 Totals	5579	1604	1215	4701	1369	1071	5984	1775	1421
%		29	22		29	23		30	24
Totals	12,047	3681	2720	10,088	3032	2235	14,441	4245	3697
%		31	23		30	22		29	26

SUMMARY OF TEST SCORES
SRA AND ITED ACHIEVEMENT SERIES

Non-Title I Schools

Reading

Grade	1969-70			1970-71			1971-72		
	Enroll-ment	1-25 %tile	26-49 %tile	Enroll-ment	1-25 %tile	26-49 %tile	Enroll-ment	1-25 %tile	26-49 %tile
2	1054	278	293	1037	303	306	520	142	147
3	1075	324	329	1044	287	315	551	195	114
4	1053	276	282	1046	267	292	532	173	117
5	1004	290	214	649	190	144	556	155	137
6	984	279	262	553	164	131	514	140	120
1-6 Totals	5170	1447	1380	4329	1211	1188	2673	805	635
%		28	27		28	27		30	24
7	897	246	226	269	70	69	840	236	206
8	856	232	204	274	81	70	819	258	149
9	1067	273	293	591	157	137	862	282	176
10	570	129	147	770	200	186	643	192	141
11	470	106	130	613	157	156	584	151	161
7-11 Totals	3860	986	1000	2517	665	618	3748	1119	833
%		26	26		26	25		30	22
Totals	9030	2433	2380	6846	1876	1806	6421	1924	1468
%		27	26		27	26		30	23

The following table which summarized attendance at the grade levels indicated in all experimental and control schools is presented as additional evidence of needs for program innovation. Note that there is a continued increase in absence from grade 3 through grade 9.

SUMMARY OF ATTENDANCE DATA
IRIS READING PROJECT
1971-72

Grade	Number of Dropouts	Aggregate Days of Membership	Aggregate Days of Attendance	Aggregate Days of Absence	Per Cent of Absence
3		45,021	43,341	1,680	3.7
4		50,958	49,044	1,914	3.8
7		102,380	98,033	4,347	4.2
9	43	238,515	222,140	16,374	6.9

PART II--Effectiveness/Success (cont.)

Objective No. 1

3. Briefly describe the intervention process for this objective including where appropriate the following elements: grade level(s), number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental community involvement, pre-service/in-service training, etc.

Describe activities for the attainment of the objective:

Individualized Reading Instruction for Students is a computer-managed reading project based on diagnosis - prescription - treatment - post criterion referenced testing. The project was funded for a three year period beginning July 1, 1972 to June 30, 1975. Approximately 1,000 students have been involved in the developmental phase of the project for the past three years. Approximately 339 students are involved in the third year experimental phase with 196 in experimental groups and 143 in control groups. Even though the project was developed with students in grades 2 - 10, for the third year of experimental study grades 3,4,7, and 9 were selected.

The project focus during the two years of development and field testing and the last year of implementation under the experimental design has been on students who were identified as reading below their actual reading grade placement on standardized reading tests. These students are diagnosed for specific skill deficiencies in Phonic and Structural Analysis with locally constructed, graded diagnostic tests. A period of treatment follows diagnosis. Educational prescriptions pertaining to known and identified reading problems of individual students are written. A computer-based materials retrieval manual is used by teachers to develop these prescriptions. Evaluation after treatment of specific skill deficiencies is used for the purpose of determining whether skills deficiencies have been corrected. Criterion referenced tests have been constructed in each skill area on three levels to make this evaluation after treatment. Monitoring forms provide a valuable service in the reading management system by tracking skills growth of individual students or groups, for instructional planning and for transmitting information to data processing. Periodic computer print-outs are provided to individual teachers, school and system.

supervisory personnel in order to provide information on the various aspects of the reading program. In-service programs were initiated for Title III staff, teachers, aides, and principals to lend guidance in exposing them to new and innovative methods of instruction. Workshops designed to acquaint teachers with components of the reading system were held prior to the introduction and implementation of each part of the reading lab. These workshops proved to be very valuable in restructuring teacher attitudes toward individualized instruction and the management of the reading program in the classroom with the aid of a computer.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(a). Provide the evaluation design (pre - posttest, baseline data, posttest only, experimental control, etc.,) which, when implemented, will provide the information necessary to determine to what extent the objective was actually attained.

Describe evaluation design:

It was determined by the staff at the beginning of the renewal year that during this, the third year of the project with full implementation, it will be necessary to evaluate the project in terms of control groups. Consequently a control group was set up to be a part of the experimental design. The students that were participating in the project experimentally were of two groups, those who were continuing from their second year who had been involved early as part of the field testing group, and those who were beginning the program for the first time. In much of the analysis the two experimental groups were treated separately. Data presented as an evaluation of these groups were included together as one experimental group. The analysis of covariance technique was selected for statistical analysis of the data gathered. The design is a pretest - posttest design with the pretest used as the covariate in the analysis of covariance. Thus the pretest served as baseline data in determining the level at which all persons began the project year.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(b). For the objective under consideration, describe data collection procedures specifying type of data collected, method of data collection, timelines, responsible persons, etc., Chart format is suggested.

Describe the data collection procedures:

The times for testing and data collection were set prior to the school year and have been maintained and deadlines have been met throughout. Tests were given prior to the beginning of the instructional activities. The data was scored and forwarded to the staff office where it was recorded and summarized for later analysis. The posttest was administered in all schools at the times indicated on the attached test schedules, and the tests were scored and the results summarized and submitted to the computer center for analysis.

29A
(Obj. 1)

PRE - POST DIAGNOSTIC TEST SCHEDULE

SCHOOL	DATE PRETEST GIVEN	DATE POSTTEST GIVEN	TEST DATA COMPILED RECEIVED IN TITLE III OFFICE
Brame Jr. High School	9-13-74	Week of Mar. 17-21	9-17-74 3-21-75
St. Rita's School	9-11-74	"	9-13-74 3-21-75
Alexandria Senior High School	9-24-74	"	9-27-74 3-21-75
Tioga High School	9-10-74	"	9-13-74 3-21-75
Nachman Elementary School	9-12-74	"	9-13-74 3-21-75
Menard High School	9-13-74	"	9-17-74 3-21-75
Poland High School	9-11-74	"	9-16-74 3-21-75
Cherokee Elementary School	9-12-74	3-19-75	9-13-74 3-21-75
Prompt Succor	9-11-74	3-20-75	9-13-74 3-21-75
Ruby Wise Jr. High	9-10-74	3-18-75	9-12-74 3-21-75
Pineville High	9-13-74	3-19-75	9-17-74 3-21-75
Bolton High	9-13-74	3-19-75	9-17-74 3-21-75
Jones Street Jr. High	9-12-74	3-20-75	9-16-74 3-21-75

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(c). If evaluation information was collected on a sampling of the project's participants, describe sampling technique. Give sampling size and evidence of representativeness.

If sampling procedure was not used, write "Not Applicable" (NA) below.

Describe sampling technique:

Experimental group students were selected by test scores. A sample for the control group was selected for all non-participating students that were comparable throughout the parish. The procedures for selecting control groups is described in Part II, 4(e), Objective 1. The subjects in the experimental group were not sampled; thus testing involved all of those who participated in the program. This section is not applicable other than to the extent that the control group represented a sample of the remainder of the school population.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(d). Provide supporting evidence that the attainment of the objective can be attributed to the project intervention (treatment) activities.

Describe evidence of effectiveness:

Throughout the project efforts were made to continually monitor the activities within the control and experimental groups to assure that the results would have validity in terms of the treatment administered. Pretesting and posttesting assured that analysis would be made in terms of amount gained by each person regardless of where he started. Since there were no unusual occurrences during testing to affect the results and since there were no unusual occurrences in the instructional program in either the control or experimental groups, the project staff feels that the changes that occurred in the students were a result of the program involved. In addition, the basic research design and testing procedures have assured the staff that the changes occurred as a result of the program. For example, the number of students involved in the experimental and control groups was so large that it eliminated the chance that the student groups may be extremely different due to chance differences of a few individuals. With such large numbers of students in each group there were assurances that the groups were representative of the population.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(e). Where control groups exist, describe how they were selected and give some indication of their equivalency to the project group.

If control groups were not used, write "not applicable" (NA) below.

Describe procedure, give evidence of equivalency:

Using a pretest - posttest control group design for the third year of the project, 196 students in grades 3, 4, 7, and 9 of the project schools were matched with 143 students from 6 control schools to participate in the project.

The distribution of the target population is as follows:

	Experimental Group		Control Group
Grade Level	Students treated in project for 1 year	for 2 years	No treatments
3	31	0	34
4	18	18	26
7	36	10	49
9	70	13	34
Sub-Total	155	41	
Total	196		143

Five public schools and two parochial schools were selected to participate in the development and implementation phases of the project. In addition, five public and one parochial school were selected to serve as control population in the third year of the project. Target schools are:

EXPERIMENTAL	CONTROL
Public Schools	
Nachman Elem. (K-6) Urban	Cherokee Elem. (K-6) Urban
Brame Jr. High (7-8) Urban	Jones St. Jr. High (7-8) Urban
Alex. Sr. High (9-12) Urban	Bolton High (9-12) Urban
Tioga High (9-12) Suburban	Pineville High (9-12) Suburban
Poland High (K-12) Rural	Ruby Wise Jr. High (K-8) Rural
Parochial Schools	
St. Rita (1-8) Urban	Prompt Succor (1-8) Urban
Menard Central High (9-12) Urban	

These schools were selected on the basis of the following criteria:

(1) Location (rural, suburban, urban)

(2) Ethnic Composition

(3) Similarity of physical plants

(4) Similarity of staffing

(5) Similarity of curriculum

(6) P.M.A. Test scores

(7) Comparability of overall achievement of students on S.R.A. Assessment survey (Achievement Series E and F, and I.T.E.D. Form X5 and Y5) given in March, 1974, as indicated in the following chart:

EXPERIMENTAL	Standard Scores		CONTROL	Standard Scores	
	Composite	Reading		Composite	Reading
Public Schools					
Nachman			Cherokee		
Grade 2		2-5	Grade 2		2-6
Grade 3	4-5	4-5	Grade 3	4-6	4-6
Grade 6	6-8	7-2	Grade 6	6-1	6-9
Brame Jr. High			Jones St. Jr. High		
Grade 7	7-4	7-2	Grade 7	5-8	5-4
(Feeder to ASH)			Pineville Jr. High		
Grade 8	8-1	8-1	(Feeder to PHS)		
Alex. Sr. High	14.1	13.5	Grade 8	8-3	8-3
Tioga Jr. High					
(Feeder to THS)			Bolton High		
Grade 8	7-6	7-8	Grade 10	14.2	12.9
Tioga High			Pineville High		
Grade 10	14.5	14.0	Grade 10	14.3	13.9
Poland High			Ruby Wise Jr. High		
Grade 2	2-9	2-5	Grade 2	2-9	2-5
Grade 3	3-5	3-3	Grade 3	3-8	3-8
Grade 6	6-7	6-6	Grade 6	6-5	6-6
Grade 8	7-5	7-6			
Grade 10	12.0	10.6			
Parochial Schools					
St. Rita			Prompt Succor		
Grade 2	3-2	3-4	Grade 2	3-6	4-1
Grade 3	4-1	4-1	Grade 3	4-6	4-5
Grade 6	7-4	7-1	Grade 6	7-9	8-1

Schools were matched as near as possible to type of physical plant, location (urban, suburban, rural), type of staffing, and similarity of curriculum. Students who were then chosen for the control group had to meet the same standards for selection into the program as those students in the experimental groups on the tests used (S.R.A. achievement, I.T.E.D., and locally constructed diagnostic tests). In addition, the groups were matched on mental ability as measured by the P.M.A. (most students were below 100 with approximately the same number in each group scoring above 100.) The criteria were applied to students in this order:

(1) S.R.A. Achievement or I.T.E.D. reading Equivalency

(2) I. Q.

(3) locally constructed diagnostic tests

It was recongized that there would be chance differences between the control group and experimental group and possibly some other differences would exist. This was the reason that the analysis of covariance procedure was used on order to make the groups equivalent on a given variable. The decision was made to use the pretest as the control variable and anything which might affect a person's pretest score would be involved in the covariance procedure. If the groups were unequal on the pretest, then the analysis of covariance procedure would, through statistical control, make the groups equivalent and the gain would be shown on the posttest was the gain that was made not related to the pretest score. An analysis of the means scores on the pretest indicates considerable differences which confirms the necessity for using the covariance technique. In Structural Analysis for example, the control group mean was considerably higher than either of the experimental groups on the pretest. The control group mean was 192.8 compared to 179.1 for experimental group 1, the first year experimental group, and 173.1 for the second year experimental group. On the Phonics Level I test, analysis of scores indicates a reversal of this process that in both experimental groups, the pretest mean was higher than in the control group. The control group mean was 203.3, the first year experimental group mean was 213.4, and the second year experimental mean was 217.4. In the Phonics Level II test the control group mean was the lowest mean with some considerably difference in the mean of the control group and the second year experimental. The control group mean was 168.4, the first year experimental group pretest mean was 176.8, and the second year experimental group has a pretest mean of 189.2.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(f). **Identify and describe each instrument utilized in the evaluation. Instruments can be standardized or locally developed tests, questionnaires, interview forms, rating forms, inventories, etc. Include information concerning the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.**

Identify and describe instrument:

The locally constructed diagnostic reading tests were used in the analysis. The particular instruments used to test for achievement of this objective were:

Diagnostic Test, Phonic Analysis, Level I
Diagnostic Test, Phonic Analysis, Level II
Diagnostic Test, Structural Analysis

These instruments were developed over a long period of time and have been revised and have gone through limited revision since. Involved in the development of these were the project staff, the reading teachers involved in the project, consultants in the area of reading, and a project evaluator. These instruments were examined for validity and for reliability when they were constructed. The following information is reported here from the technical manual for the diagnostic reading test.

VALIDITY

Technical data were compiled on each of the tests in order to determine the validity and reliability of the tests used. The technical data are compiled in the manual of Instructions for each of these tests as indicated.

Phonic Analysis Manual of Instruction, Level I, pages 19-28
Phonic Analysis Manual of Instruction, Level II, pages 19-28
Structural Analysis Manual of Instruction, pages 16-25

In order to obtain an estimate of the criterion related validity of the tests, a suitable criterion was sought. It was felt that since the Doren Diagnostic Reading Tests were used extensively in the Parish schools and that many of the subtests of this test appeared to be representative of subtests on the IRIS tests, the Doren test would be an appropriate test to use for comparison. Validity coefficients were computed for the total scores for each of the three locally constructed tests. (Phonic Analysis, Levels I and II and Structural Analysis). In order to obtain the validity coefficients, samples of students were administered both tests. The scores on these tests were then correlated, using the Pearson Product - Moment correlation technique. The resulting correlation coefficients are thus reported as estimates of validity. Table I shows the established validity for the total test scores for each test. As can be seen, the validity coefficients range from .78 for Structural Analysis to .81 for Level II Phonic Analysis and .94 for Level I Phonic Analysis. Perfect validity would be represented by a coefficient of 1.0 (No test has such validity.) In comparison to other tests currently available on the market today, the validity of the three tests is acceptable.

Establishing validity on subtests presents additional problems. Those subtests on the locally constructed tests that appeared to have some direct relation to particular subtests on the Doren were correlated with these subtests to establish validity coefficients. These results appear in Tables I, II, III, and IV, pages 20 and 21 of the technical manual. As can be noted the validity of subtests is generally lower than the validity for the total score which represents greater variability and other statistical characteristics conducive to high validity.

TABLE I

Tests of Validity
Diagnostic Reading Tests
Criterion: Doren Diagnostic Reading Test

TEST	GRADES TESTED	VALIDITY COEFFICIENT
Phonic Analysis		
Level I	2 - 4	.94
Level II	5 - 10	.81
Structural Analysis	4 - 10	.78

TABLE II

Tests of Validity
Selected Subtests of Level I Phonic Analysis Test
Criterion: Subtest scores on Doren Diagnostic Reading Tests

LEVEL I SUBTESTS	DOREN SUBTESTS	GRADES TESTED	VALIDITY COEFFICIENT
Letter Recognition	Letter Recognition	2 - 4	.84
Initial Consonant Sounds	Beginning Sounds	2 - 4	.62
Final Consonants	Final Consonants/Endings	2 - 4	.53
Consonant Blends & Digraphs	Consonant Blends	2 - 4	.66
Consonant Blends & Digraphs	Speech Consonants	2 - 4	.63
Vowel Recognition	Vowels	2 - 4	.76
Phonetic Respelling	Sight Words	2 - 4	.83

TABLE III

Tests of Validity
Selected Subtests of Level II Phonic Analysis Test
Criterion: Selected Subtests of Doren Diagnostic Reading Tests

LEVEL II SUBTESTS	DOREN SUBTESTS	GRADES TESTED	VALIDITY COEFFICIENT
Initial Consonant Sounds	Beginning Sounds	5 - 10	.50
Final Consonants	Final Consonant Sounds/Endings	5 - 10	.38
Consonant Blends/Digraphs	Consonant Blends	5 - 10	.55
Consonant Blends/Digraphs	Speech Consonants	5 - 10	.29
Vowel Recognition	Vowels	5 - 10	.35
Phonetic Respelling	Sight Words	5 - 10	.62

TABLE IV

Tests of Validity
Selected Subtests Structural Analysis Diagnostic Tests
Criterion: Selected Subtests Doren Diagnostic Reading Test

STRUCTURAL ANALYSIS SUBTESTS	DOREN SUBTESTS	GRADES TESTED	VALIDITY COEFFICIENT
Endings	Final Consonant Sounds	4 - 10	.65
Compound Words	Words within Words	4 - 10	.87

RELIABILITY

The Kuder-Richardson Formula 21 was selected in order to determine an estimate of test reliability for each of the three tests. The resulting reliability coefficients are presented in Table V, page 22 . (It should be remembered that perfect reliability is represented by a coefficient of 1.0) The reliabilities for each of the three test batteries ranged from .95 to .96 which should be considered very high.

TABLE V

Tests of Reliability
Total Scores Locally Constructed Diagnostic Reading Tests

TEST	MEAN	STANDARD DEVIATION	RELIABILITY COEFFICIENT
Level I Phonic Analysis	223.95	23.23	.95
Level II Phonic Analysis	196.9	19.67	.96
Structural Analysis	209.10	18.37	.95

In addition to the information cited above on validity and reliability, the tests were examined at the time to see if each provided sufficient range and scope for the evaluation of the students that were designated as target groups for the project. The tests were found largely to be successful in this area, that is, of providing a means to assess the gain made by any student who might be chosen for the project.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(g). Give evidence that persons responsible for data collection (administration of tests, inventories, attitude scales, etc.) were qualified for their tasks. If any instrument utilized required special training or procedures, so indicate.

State qualifications and special training

Data collection for evaluation of this objective was carried out by the project director and the reading coordinator. Each of these persons is well qualified for his position. In addition, the teachers involved in the project have been trained in the administration of the diagnostic tests. Sessions during the in-service program provided for this training with continued follow-up on site by the project director. Extensive procedures were adopted to assure that the data that were being given for assessment of the objective were accurate. The reading coordinator checked on the scoring of the tests by the individual teachers. As the data was summarized, it was read into the computer and lists of scores were given back to the reading coordinator and project director and these scores were verified. There was at least sampling checks on each phase of the scoring and data collection procedures as well as the input system for the computer. The computer program to compute the analysis of covariance was checked for accuracy. In summary, all phases of statistical computation were checked to assure accuracy.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(h). Describe data verification procedures used to assure the accuracy of data for each objective. The descriptions should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Describe the procedures:

Pre and posttest data on students were gathered by Title III teachers and staff who were given in-service training in test administration and data-gathering techniques. The following data verification procedures were used to insure accuracy:

(1) All students in the project were assigned numbers for the purpose of tracking student information in the computer.

(2) Student profile sheets served as an initial source of data gathering for individual student subtest scores on pre and posttests.

(3) Class summary sheets were used to record total test data from individual student profile sheets.

(4) Individual student test data were keypunched from summary sheets and stored on computer tapes.

(5) Data processing returned to Title III staff a printout of data for correction.

(6) Corrected data were keypunched and stored.

(7) Data processing furnished Title III staff with a printout of individual student scores for final editing and verifying against initial source data.

PART II--Effectiveness/Success (cont.)

Objective No. 1

4(i). Report the data analysis procedure(s) used in data treatment and interpretation. Include names of persons or agencies responsible for data analysis.

Describe procedures:

The project evaluator, Dr. Otis Cox, was responsible for data treatment and interpretation. The analysis of data for this objective included the summarizing of data and computation of means as well as the analysis of covariance in order to test the significance of differences among means. The pretest and posttest scores were read into the computer, and the computer program was developed for the analysis of covariance. This program was tested by the project evaluator and suggestions were made for its improvement. There were further tests and checks on this program to assure that the program was functioning accurately and providing the information needed for interpretation. The computer center provided the evaluator with outputs of data representing the components involved in the analysis of covariance. The analysis of covariance was then further computed by hand for verification and the results were reported in tables.

PART II--Effectiveness/Success (cont.)

Objective No. 1

5. Provide statistical evidence that the objective was attained at or above the criterion level(s) established for that objective.

Present evidence:

The results of the statistical analysis for the evaluation of this objective can be found in the tables that follow. The results of the analysis of covariance indicate that the project was successful in reaching the objective. Significant differences were found in the achievement levels of the experimental groups when compared to the achievement level of the control group. The analysis of data for this section will be presented in five parts:

(a) Structural Analysis

(b) Phonics - Level I

(c) Phonics - Level II

(d) Summary of Multiple Comparisons

(e) Supplementary Analyses

(a) Structural Analysis - The analysis of covariance was conducted in order to evaluate the objective is reported in the table that immediately follows.

37A
(Obj. 1)

STRUCTURAL ANALYSIS
SUMMARY OF ANALYSIS OF COVARIANCE

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	2748.98	225195.71	227944.69
Sum of squares: Posttest	12361.11	112424.36	124785.47
Sum of products	-3473.18	121787.76	118314.52
Degrees of freedom	2	243	245
Adjusted sum of squares: Posttest	16813.85	46560.57	63374.42
Degrees of freedom for adjusted sum of squares	2	242	244
Variance estimates	8406.925	192.39904	

$F = 43.695254$ $p < .01$

This table shows that the F ratio of 43.7 resulting from the analysis was significant at the .01 level. There were statistically significant differences in the performances of the groups. An evaluation of the group means in the following table shows that both experimental groups achieved higher adjusted posttest means than did the control group even through the control group began the experiment with a higher mean than either of the experimental groups.

STRUCTURAL ANALYSIS
SUMMARY OF MEAN SCORES

GROUP	PRETEST MEAN	POSTTEST MEAN	ADJUSTED POSTTEST MEAN
Control	192.83	199.76	192.9297
1 year experimental	179.05	203.11	203.7319
2 year experimental	173.13	195.35	199.2135

These results indicate that the reading program was able to achieve significantly higher gains in the experimental students than was achieved by the control group under the traditional reading program.

(b) Phonics, Level I - The analysis of covariance to test this hypothesis is reported in the table that follows.

PHONIC ANALYSIS - LEVEL I
SUMMARY OF ANALYSIS OF COVARIANCE

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	4170.25	64203.50	68373.76
Sum of squares: Posttest	3892.45	32068.82	35961.27
Sum of products	3940.60	35857.33	39797.93
Degrees of freedom	2	24	126
Adjusted sum of squares: Posttest	253.631	12042.683	12796.314
Degrees of freedom for adjusted sum of squares	2	123	125
Variance estimates	376.815	97.907991	

$F = 3.8486644 \quad p < .05$

The F ratio of 3.85 was significant at the .05 level. This result indicated significant differences existed in the adjusted posttest means for the three (3) groups. An analysis of the adjusted means in the following table shows that the means of both experiment groups was higher than the mean of the control group. Thus, the experimental program was able to produce significant gains in the experimental groups when compared to the control group.

PHONIC ANALYSIS - LEVEL I
SUMMARY OF MEAN SCORES

	MEAN SCORES		
GROUP	PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	203.27	219.13	222.425
1 year experimental	213.37	227.22	224.814
2 year experimental	217.39	234.50	229.909

(c) Phonics, Level II - An analysis of covariance was conducted on the test scores for the Phonic, Level II diagnostic test that was given pretest and posttest to the control and experimental groups. This analysis resulted in a ratio of 11.68 which was significant at the .01 level as indicated in the table that follows.

37D
(Obj. 1)

PHONIC ANALYSIS - LEVEL II
SUMMARY OF ANALYSIS OF COVARIANCE

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	8662.74	144416.02	153078.76
Sum of squares: Posttest	14233.14	128181.78	142414.92
Sum of products	9866.40	116105.14	125971.54
Degrees of freedom	2	209	211
Adjusted sum of squares: Posttest	3912.91	34837.55	38750.46
Degrees of freedom for adjusted sum of squares	2	208	210
Variance estimates	1956.455	167.488	

$F = 11.68 \quad p < .01$

This indicated that there were significant differences among the groups even after the analysis of covariance was used. An inspection of the means in the table to follow indicates that both experimental groups scored higher than did the control group in this analysis.

PHONIC ANALYSIS - LEVEL II
SUMMARY OF MEAN SCORES

	MEAN SCORES		
GROUP	PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	168.39	175.94	181.3496
1 year experimental	176.84	191.85	190.23
2 year experimental	189.72	195.65	184.0804

Thus the statistical evidence indicates the superiority of the individualized reading program when compared to the traditional reading program.

(d) Summary of multiple comparison techniques - The following table summarizes the multiple comparisons made to compare individual groups within the significant F ratio analysis for each of the three tests. It can be noted that all but two of these individual comparisons were significant at the .01 level. The Scheffé procedure for multiple comparisons was used.

SUMMARY OF MULTIPLE COMPARISONS USING THE SCHEFFÉ METHOD

Test	Groups Being Compared	t-ratio	Level of Significance
Structural	Control vs. Experimental I	6.17	.01
	Control vs. Experimental II	3.99	.01
	Experimental I vs. Experimental II	3.10	.01
Phonics - Level I	Control vs. Experimental I	1.36	N.S.
	Control vs. Experimental II	4.81	.01
	Experimental I vs. Experimental II	3.47	.01
Phonic - Level II	Control vs. Experimental I	5.00	.01
	Control vs. Experimental II	1.70	N.S.
	Experimental I vs. Experimental II	4.12	.01

N.S. = Not significant

Experimental I = Students enrolled in the program for the first time this year.

Experimental II = Students who were enrolled in the field testing groups last year and who are participating this year.

(e) Supplementary Analyses - The following section is a complete analysis of the data with all experimental students included in one group. It was felt that this analysis may simplify interpretation by others since there was little difference in the original two experimental groups.

It can be noted that statistically significant differences were determined in favor of the experimental groups over the control group on all three tests. Further examination of the adjusted means reveals the superiority of the achievement of the experimental students.

STRUCTURAL ANALYSIS
SUMMARY OF ANALYSIS OF COVARIANCE

CONTROL GROUPS COMPARED TO ALL EXPERIMENTAL GROUPS COMBINED

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	1912.53	226031.98	227944.51
Sum of squares: Posttest	10916.94	113868.38	124785.32
Sum of products	- 4574.51	122889.03	118314.52
Degrees of freedom	1	244	245
Adjusted sum of squares: Posttest	14355.298	47055.81	61411.108
Degrees of freedom for adjusted sum of squares	1	243	244
Variance estimates	14355.798	193.6453	

F= 74.13 $p < .01$

STRUCTURAL ANALYSIS
SUMMARY OF MEAN SCORES

GROUP	PRETEST MEAN	POSTTEST MEAN	ADJUSTED POSTTEST MEAN
Control	192.83	199.76	192.94
Experimental	177.71	201.36	202.70

37C
(Obj. 1)

PHONIC ANALYSIS, LEVEL I TEST
SUMMARY OF ANALYSIS OF COVARIANCE

CONTROL GROUP COMPARED TO ALL EXPERIMENTAL GROUPS COMBINED

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	3957.28	64416.36	68373.64
Sum of squares: Posttest	3195.81	32765.36	35961.17
Sum of products	3555.43	36242.50	39797.93
Degrees of freedom	1	125	126
Adjusted sum of squares: Posttest	421.887	12374.86	12796.73
Degrees of freedom for adjusted sum of squares	1	124	125
Variance of estimates	421.887	19.147	

$F = 22.03$ $p < .01$

PHONIC ANALYSIS, LEVEL I
SUMMARY OF MEAN SCORES

GROUP	MEAN SCORES PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	203.27	219.13	221.14
Experimental	214.45	229.18	227.38

37H
(Obj. 1)

PHONIC ANALYSIS, LEVEL II TEST
SUMMARY OF ANALSIS OF COVARIANCE

CONTROL GROUP COMPARED TO ALL EXPERIMENTAL GROUPS COMBINED

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	5773.79	147304.86	153078.68
Sum of squares: Posttest	13960.38	128454.40	142414.78
Sum of products	8977.82	116993.72	125971.54
Degrees of freedom	1	210	211
Adjusted sum of squares: Posttest	3215.58	35534.66	38750.24
Degrees of freedom for adjusted sum of squares	1	209	210
Variance estimates	3215.50	170.02	

$F= 18.91$ $p < .01$

PHONIC ANALYSIS, LEVEL II
SUMMARY OF MEAN SCORES

GROUP	MEAN SCORES		
	PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	168.39	175.94	181.03
Experimental	179.06	192.53	189.19

PART II--Effectiveness/Success (cont.)

Objective No. 1

6. **In addition to previously cited statistical evidence provide evidence of educational significance of the reported findings.**

Present evidence:

The statistical evidence indicated that the students in the experimental groups achieved a higher mean score than the students in the control group. This was not accomplished without additional evidence that the project has significance for education. An overall approach to the 4 objectives being evaluated in this validation study would indicate that teachers achieved the goals set for them in in-service. Teachers attitudes changed favorably toward the components of the project. Students enrolled in the project achieved higher level than students outside the project. Students' attitudes improved toward the project in most categories of reading concepts. Thus the overall result is that here is a project that not only achieves a cognitive goal but relates to both faculty and students in a positive way. An additional asset in the field of education is that the project can be exported without requiring major reordering within the new system.

PART II--Effectiveness/Success (cont.)

Objective No. 1

7. State the conclusions which were drawn from the results reported.

State conclusions:

1. The program was effective in producing higher means in the experimental groups when compared to the control groups.
2. These differences were statistically significant.

PART II-- Effectiveness/Success (cont.)

Objective No. 2

1. State each major objective to be validated on a separate set of Part II, Effectiveness/Success, forms. Number each objective for identification. From here on, identify the objective by its assigned number. You will need as many sets of Part II forms as there are objectives to be validated.

   Objectives should be stated in measurable terms reflecting who, upon completion of the project intervention (treatment), will be able to do what at what level of performance. Any objective not meeting the necessary specifications of measurability will be eliminated from further review, investigation and validation.

   State Objective:

   Students in grades 3, 4, 7, and 9 who participate in the IRIS program will demonstrate a significantly greater (.05 level) gain in attitude toward selected reading concepts than control group students as measured by the Semantic Differential.

PART II--Effectiveness/Success (cont.)

Objective No. 2

2. Provide evidence to justify the need for the objective under consideration by describing the needs assessment procedures and the related findings.

A direct relationship should exist between the identified needs and the anticipated behaviorial change defined by the major project objectives.

Description of needs assessment and findings:

The data cited in the assessment of needs for Objective 1 indicate a clear need for a reading improvement program. In most educational settings the staff and faculty are concerned about the attitudes of the person as well as trying to change him cognitively in order to achieve a goal. It was assumed by Title III staff and was confirmed by the pretest assessment of student attitudes on a locally constructed attitude survey that students who are deficient in reading also have a need for a change in their attitude toward reading. It was felt by the staff and teachers that if students improved their ability to read that the student attitude toward reading would also show significant improvement. This objective represented an attempt to measure the attitudinal change that might result with the individuals involved as they pursued the individualized reading program. The attitudes chosen were those of selected reading concepts which were deemed to be pertinent to a person's overall attitude toward reading.

The following table presenting attendance data in the participating schools is presented as additional evidence for the increasing need for attitudinal change as the student progresses through each successive grade level.

SUMMARY OF ATTENDANCE DATA
IRIS READING PROJECT
1971-72

Grade	Number of Dropouts	Aggregate Days of Membership	Aggregate Days of Attendance	Aggregate Days of Absence	Per Cent of Absence
3		45,021	43,341	1,680	3.7
4		50,958	49,044	1,914	3.8
7		102,380	98,033	4,347	4.2
9	43	238,515	222,140	16,374	6.9

PART II--Effectiveness/Success (cont.)

Objective No. 2

3. Briefly describe the intervention process for this objective including where appropriate the following elements: grade level(s), number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental community involvement, pre-service/in-service training, etc.

Describe activities for the attainment of the objective:

The intervention process with students was described for Objective 1 in terms of the cognitive intervention involved. There was no attempt to change the attitude of the person per se within the reading program. Emphasis was placed on students working at their level, at their own rate, with competition centered entirely around self-improvement. An evaluation following treatment to measure success provided the impetus whereby students could feel comfortable and relaxed in the reading-learning process. Also the record keeping system of the project enabled students to be aware at all times of their progress, and enabled them to set individual goals based on their interpretation of their past successes and accomplishments. This objective represented an attempt to measure the change that would occur because of the involvement in the program. Therefore, the intervention that was involved here was the same intervention as Objective 1 with no particular program assigned primarily to produce attitudinal change.

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(a). Provide the evaluation design (pre - posttest, baseline data, posttest only, experimental control, etc.,) which, when implemented, will provide the information necessary to determine to what extent the objective was actually attained.

Describe evaluation design:

Students were tested in this project, both pretest and posttest, using the semantic differential developed by C. E. Osgood, et al., at Harvard University. The evaluation design was taken from Campbell and Stanley and involves the subtraction of pretest scores from posttest scores. These differences were then used to test for statistical significance between groups using the t-ratio for independent groups. So the statistical tests will be tests of significant differences of mean gains, rather than of mean scores. This design was selected for its simplicity and as a means of providing for persons starting the program both in experimental and control groups to have differences in pretest scores.

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(b). For the objective under consideration, describe data collection procedures specifying type of data collected, method of data collection, timelines, responsible persons, etc., Chart format is suggested.

Describe the data collection procedures:

Procedures for data collection for this objective were as follows: The reading coordinator and project director were responsible for administering all tests. These were brought to the Central Office and scored by the staff, and the pretest scores recorded. Upon completion of the posttests, these tests were scored at the office and the posttest scores recorded. Then the pretest scores were all subtracted from the posttest scores, and the differences recorded for each separate concept evaluated as well as for the total scores. The testing schedule was completed as indicated in the following table.

29A
(Obj. 2)

PRE - POST SEMANTIC DIFFERENTIAL TEST SCHEDULE

SCHOOL	DATE PRETEST GIVEN	DATE POSTTEST GIVEN	TEST DATA COMPILED RECEIVED IN TITLE III OFFICE
Brame Jr. High School	9-27-74	3-19-75	9-28-74 3-21-75
St. Rita's School	10-7-74	3-18-75	10-8-74 3-19-75
Alexandria Senior High School	10-1-74	3-18-75	10-4-74 3-21-75
Tioga High School	10-1-74	3-18-75	10-4-74 3-21-75
Nachman Elementary School	10-1-74	3-20-75	10-4-74 3-21-75
Menard High School	10-7-74	3-20-75	10-8-74 3-21-75
Poland High School	10-7-74	3-19-75	10-10-74 3-20-75
Cherokee Elementary School	10-1-74	3-19-75	10-1-74 3-19-75
Prompt Succor	10-3-74	3-20-75	10-3-74 3-20-75
Ruby Wise Jr. High	10-7-74	3-18-75	10-7-74 3-18-75
Pineville High	10-4-74	3-21-75	10-4-74 3-21-75
Bolton High	10-1-74	3-19-75	10-2-74 3-19-75
Jones Street Jr. High	10-2-74	3-20-75	10-3-74 3-20-75

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(c). If evaluation information was collected on a sampling of the project's participants, describe sampling technique. Give sampling size and evidence of representativeness.

If sampling procedure was not used, write "Not Applicable" (NA) below.

Describe sampling technique:

In this section, for Objective 1, it was described that all the persons who were in the experimental group were tested and that a control group was selected to match those persons. Except for the selection of the control group, there was no sampling procedure. See the explanation of the control group selection in Part II, No. 4(e).

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(d). Provide supporting evidence that the attainment of the objective can be attributed to the project intervention (treatment) activities.

Describe evidence of effectiveness:

The students involved in the project were not engaged in any other activity related to reading improvement or attitudinal change toward reading during the course of the project. Large numbers of students were involved so that the numbers of students in the groups would more reliably reflect the population involved. Pretests were administered and the differences that were achieved can be attributed to the time interval between pretest and posttest, and this further assures that whatever gain or differences exist occurred during the course of the project.

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(e). Where control groups exist, describe how they were selected and give some indication of their equivalency to the project group.

If control groups were not used, write "not applicable" (NA) below.

Describe procedure, give evidence of equivalency:

Approximately 1,000 students in grades 2 - 10, reading below their reading expectancy level as evidenced by standardized tests, have been involved in the development and implementation of the IRIS project over the past 3 years. Using a pretest - posttest control group design for the third year of the project, 196 students in grades 3, 4, 7, and 9 of the project schools were matched with 143 students from 6 control schools to participate in the project.

The distribution of the target population is as follows:

	Experimental Group		Control Group
	Students treated in project		No
Grade Level	for 1 year	for 2 years	treatments
3	31	0	34
4	18	18	26
7	36	10	49
9	70	13	34
Sub-Total	155	41	
Total	196		143

Five public schools and two parochial schools were selected to participate in the development and implementation phases of the project. In addition, five public and one parochial school were selected to serve as control population in the third year of the project. Target schools are:

EXPERIMENTAL	CONTROL
Public Schools	
Nachman Elem. (K-6) Urban	Cherokee Elem. (K-6) Urban
Brame Jr. High (7-8) Urban	Jones St. Jr. High (7-8) Urban
Alex. Sr. High (9-12) Urban	Bolton High (9-12) Urban
Tioga High (9-12) Suburban	Pineville High (9-12) Suburban
Poland High (K-12) Rural	Ruby Wise Jr. High (K-8) Rural
Parochial Schools	
St. Rita (1-8) Urban	Prompt Succor (1-8) Urban
Menard Central High (9-12) Urban	

These schools were selected on the basis of the following criteria:

(1) Location (rural, suburban, urban)

(2) Ethnic Composition

(3) Similarity of physical plants

(4) Similarity of staffing

(5) Similarity of curriculum

(6) P.M.A. Test scores

(7) Comparability of overall achievement of students on S.R.A. Assessment survey (Achievement Series E and F, and I.T.E.D. Form X5 and Y5) given in March, 1974, as indicated in the following chart:

32B
(Obj. 2)

EXPERIMENTAL	Standard Scores Composite	Standard Scores Reading	CONTROL	Standard Scores Composite	Standard Scores Reading
		Public Schools			
Nachman			Cherokee		
Grade 2		2-5	Grade 2		2-6
Grade 3	4-5	4-5	Grade 3	4-6	4-6
Grade 6	6-8	7-2	Grade 6	6-1	6-9
Brame Jr. High			Jones St. Jr. High		
Grade 7	7-4	7-2	Grade 7	5-8	5-4
(Feeder to ASH)					
Grade 8	8-1	8-1	Pineville Jr. High		
			(Feeder to PHS)		
Alex. Sr. High	14.1	13.5	Grade 8	8-3	8-3
Tioga Jr. High					
(Feeder to THS)			Bolton High		
Grade 8	7-6	7-8	Grade 10	14.2	12.9
Tioga High			Pineville High		
Grade 10	14.5	14.0	Grade 10	14.3	13.9
Poland High			Ruby Wise Jr. High		
Grade 2	2-9	2-5	Grade 2	2-9	2-5
Grade 3	3-5	3-3	Grade 3	3-8	3-8
Grade 6	6-7	6-6	Grade 6	6-5	6-6
Grade 8	7-5	7-6			
Grade 10	12.0	10.6			
		Parochial Schools			
St. Rita			Prompt Succor		
Grade 2	3-2	3-4	Grade 2	3-6	4-1
Grade 3	4-1	4-1	Grade 3	4-6	4-5
Grade 6	7-4	7-1	Grade 6	7-9	8-1

Schools were matched as near as possible to type of physical plant, location (urban, suburban, rural), type of staffing, and similarity of curriculum. Students who were then chosen for the control group had to meet the same standards for selection into the program as those students in the experimental groups on the tests used (S.R.A. achievement, I.T.E.D., and locally constructed diagnostic tests). In addition, the groups were matched on mental ability as measured by the P.M.A. (most students were below 100 with approximately the same number in each group scoring above 100.) The criteria were applied to students in this order:

(1) S.R.A. achievement or I.T.E.D. reading equivalency

(2) I. Q.

(3) locally constructed diagnostic tests

It was recognized that there would be chance differences between the control group and experimental group and possibly some other differences would exist. This was the reason that the analysis of covariance procedure was used in order to make the groups equivalent on a given variable. The decision was made to use the pretest as the control variable and anything which might affect a person's pretest score would be involved in the covariance procedure. If the groups were unequal on the pretest, then the analysis of covariance procedure would, through statistical control, make the groups equivalent. Thus, the gain that would be shown on the posttest would be gain that was not related to the pretest score. An analysis of the means scores on the pretest indicates considerable differences which confirms the necessity for using the covariance technique. In Structural Analysis for example, the control group mean was considerably higher than either of the experimental groups on the pretest. The control group mean was 192.8 compared to 179.1 for experimental group 1, the first year experimental group, and 173.1 for the second year experimental group. On the Phonics, Level I test, analysis of scores indicates a reversal of this process that in both experimental groups, the pretest mean was higher than in the control group. The control group mean was 203.3, the first year experimental group mean was 213.4, and the second year experimental mean was 217.4. In the Phonics, Level II test the control group mean was the lowest mean with some considerable difference in the mean of the control group and the second year experimental. The control group mean was 168.4, the first year experimental group pretest mean was 176.8, and the second year experimental group had a pretest mean of 189.2.

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(f). Identify and describe each instrument utilized in the evaluation. Instruments can be standardized or locally developed tests, questionnaires, interview forms, rating forms, inventories, etc. Include information concerning the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Identify and describe instrument:

The instrument used in the evaluation of this objective was the semantic differential developed by C. E. Osgood and others at Harvard University. The semantic differential consists of a series of paired adjectives each of which represents a dichotomy. The student, then, is given a concept to consider and he rates that concept on the extreme between these two adjectives such as between good and bad. The positive end of each adjective scale is given the high score, and the negative end is given the low scores. Good would be 3 points; bad would be 1 point. The instrument that was used is on pages 68-76 of this report. The adjective pairs that were selected for the semantic differential were those developed and used by Osgood and that have been factor analyzed and studied by his group in order to arrive at a set of adjectives that would elicit certain responses. There was no attempt made to select adjectives in order to derive factor scores as is done many times with the semantic differential. A total score was all that was involved on each of the concepts to be evaluated in terms of the semantic differential. The semantic differential was chosen primarily because of the fact that the concepts to be evaluated were rather specific to the program and not to be found in another available instrument. It was also determined that the semantic differential was as effective as any instrument in eliciting the true connotative meaning that a person applies to a given concept. Thus, the staff and the evaluator felt that this instrument was more effective in meeting the needs of this particular evaluation than was any other instrument.

(Obj. 2)

NAME ______________________ SCHOOL ______________________

STUDENT NUMBER ______________ GRADE ______ DATE ______________________

ELEMENTARY

This exercise will help us understand what you think of Reading. This is not a test; no grades will be given. Feel free to express your feelings.

Below you will see eight pairs of words. Between the pairs of words you see three boxes. You are to place an X on one of the boxes on the line between each pair of words.

Let's try one. What do you think about Reading for Fun? Look again at the pairs of words. If you think Reading for Fun is good, place an X in the box near good. If you think Reading for Fun is bad, place your X near bad. If you do not know, place the X in the middle box. Do this for each pair of words as you think of Reading for Fun.

1. Reading for fun is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

2. Reading for homework is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

33B
(Obj. 2)

3. Reading library books is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

4. Reading signs and signboards is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

5. Reading comic books is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

6. Reading paperbacks is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

33C
(Obj. 2)

7. Reading about real people is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

9. Reading textbooks is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

8. Reading poetry is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

10. Reading magazines is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

33D
(Obj. 2)

11. Reading newspapers is ....

GOOD	☐	☐	☐	BAD
INTERESTING	☐	☐	☐	BORING
IMPORTANT	☐	☐	☐	UNIMPORTANT
SUCCESSFUL	☐	☐	☐	UNSUCCESSFUL
SAFE	☐	☐	☐	DANGEROUS
FAST	☐	☐	☐	SLOW
WISE	☐	☐	☐	FOOLISH
DEEP	☐	☐	☐	SHALLOW

12. Knowing the meaning of words is ....

GOOD	☐	☐	☐	BAD
INTERESTING	☐	☐	☐	BORING
IMPORTANT	☐	☐	☐	UNIMPORTANT
SUCCESSFUL	☐	☐	☐	UNSUCCESSFUL
SAFE	☐	☐	☐	DANGEROUS
FAST	☐	☐	☐	SLOW
WISE	☐	☐	☐	FOOLISH
DEEP	☐	☐	☐	SHALLOW

(Obj. 2)

NAME ______________________ SCHOOL ______________________

STUDENT NUMBER ______________ GRADE ______ DATE ______________________

JR. HIGH - SECONDARY

This exercise will help us understand what you think of Reading. This is not a test; no grades will be given. Feel free to express your feelings.

Below you will see eight pairs of words. Between the pairs of words you see three boxes. You are to place an X on one of the boxes on the line between each pair of words.

Let's try one. What do you think about Reading for Fun? Look again at the pairs of words. If you think Reading for Fun is good, place an X in the box near good. If you think Reading for Fun is bad, place your X near bad. If you do not know, place the X in the middle box. Do this for each pair of words as you think of Reading for Fun.

1. Reading for fun is ....

GOOD ☐☐☐ BAD
INTERESTING ☐☐☐ BORING
IMPORTANT ☐☐☐ UNIMPORTANT
SUCCESSFUL ☐☐☐ UNSUCCESSFUL
SAFE ☐☐☐ DANGEROUS
FAST ☐☐☐ SLOW
WISE ☐☐☐ FOOLISH
DEEP ☐☐☐ SHALLOW

2. Reading for homework is ....

GOOD ☐☐☐ BAD
INTERESTING ☐☐☐ BORING
IMPORTANT ☐☐☐ UNIMPORTANT
SUCCESSFUL ☐☐☐ UNSUCCESSFUL
SAFE ☐☐☐ DANGEROUS
FAST ☐☐☐ SLOW
WISE ☐☐☐ FOOLISH
DEEP ☐☐☐ SHALLOW

3. Reading library books is ....

GOOD ☐☐☐ BAD
INTERESTING ☐☐☐ BORING
IMPORTANT ☐☐☐ UNIMPORTANT
SUCCESSFUL ☐☐☐ UNSUCCESSFUL
SAFE ☐☐☐ DANGEROUS
FAST ☐☐☐ SLOW
WISE ☐☐☐ FOOLISH
DEEP ☐☐☐ SHALLOW

4. Reading fiction stories is ....

GOOD ☐☐☐ BAD
INTERESTING ☐☐☐ BORING
IMPORTANT ☐☐☐ UNIMPORTANT
SUCCESSFUL ☐☐☐ UNSUCCESSFUL
SAFE ☐☐☐ DANGEROUS
FAST ☐☐☐ SLOW
WISE ☐☐☐ FOOLISH
DEEP ☐☐☐ SHALLOW

5. Reading comic books is ....

GOOD ☐☐☐ BAD
INTERESTING ☐☐☐ BORING
IMPORTANT ☐☐☐ UNIMPORTANT
SUCCESSFUL ☐☐☐ UNSUCCESSFUL
SAFE ☐☐☐ DANGEROUS
FAST ☐☐☐ SLOW
WISE ☐☐☐ FOOLISH
DEEP ☐☐☐ SHALLOW

6. Reading paperbacks is ....

GOOD ☐☐☐ BAD
INTERESTING ☐☐☐ BORING
IMPORTANT ☐☐☐ UNIMPORTANT
SUCCESSFUL ☐☐☐ UNSUCCESSFUL
SAFE ☐☐☐ DANGEROUS
FAST ☐☐☐ SLOW
WISE ☐☐☐ FOOLISH
DEEP ☐☐☐ SHALLOW

7. Reading about real people is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

8. Reading newspapers is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

9. Reading magazines is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

10. Reading poetry is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

33H
(Obj. 2)

11. Reading sports stories is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

12. Reading science fiction is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

13. Reading textbooks is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

14. Reading encyclopaedias is ....

GOOD ☐ ☐ ☐ BAD
INTERESTING ☐ ☐ ☐ BORING
IMPORTANT ☐ ☐ ☐ UNIMPORTANT
SUCCESSFUL ☐ ☐ ☐ UNSUCCESSFUL
SAFE ☐ ☐ ☐ DANGEROUS
FAST ☐ ☐ ☐ SLOW
WISE ☐ ☐ ☐ FOOLISH
DEEP ☐ ☐ ☐ SHALLOW

33I
(Obj. 2)

15. Reading dictionaries is ....

GOOD	☐	☐	☐	BAD
INTERESTING	☐	☐	☐	BORING
IMPORTANT	☐	☐	☐	UNIMPORTANT
SUCCESSFUL	☐	☐	☐	UNSUCCESSFUL
SAFE	☐	☐	☐	DANGEROUS
FAST	☐	☐	☐	SLOW
WISE	☐	☐	☐	FOOLISH
DEEP	☐	☐	☐	SHALLOW

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(g). Give evidence that persons responsible for data collection (administration of tests, inventories, attitude scales, etc.) were qualified for their tasks. If any instrument utilized required special training or procedures, so indicate.

State qualifications and special training

The data was collected by Mr. Walter Gatlin, Director of the Project, and Mrs. Eva Parks, Reading Coordinator for the Project. None of the instruments utilized required special training, other than the project evaluator instructing the staff on how to administer the test and how to score the test. This was carried out in a single session.

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(h). Describe data verification procedures used to assure the accuracy of data for each objective. The descriptions should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Describe the procedures:

The data were gathered, as stated earlier, and scored by the project staff under supervision of the project director and the reading coordinator. The scoring procedures were verified by rescoring selected tests. The data were then summarized on charts for each individual. When the posttests were administered, the scoring and recording was carried out in a similar fashion. Then the project staff subtracted the pretest scores from the posttest scores getting the difference, the gain for each person and the total gain/loss for each person. All steps in this process were verified including the statistical computations later. Statistical computation of the t-ratio was performed twice on a random basis to check for accuracy. The Olivetti Programma 101 calculator was used for these computations. The program has been verified a number of times in the past as to its accuracy.

PART II--Effectiveness/Success (cont.)

Objective No. 2

4(i). Report the data analysis procedure(s) used in data treatment and interpretation. Include names of persons or agencies responsible for data analysis.

Describe procedures:

The evaluator, Dr. Otis Cox, was responsible for project data analysis procedures. As was stated earlier, the pretest scores were subtracted from the posttest scores and the differences were used in making the analyses. Using the t-ratio for independent groups, the control group was compared to the experimental group.

The primary analysis was in terms of a total gain/loss score for all concepts combined. The analysis of control vs. experimental was also made as a separate analysis for each of the reading concepts involved.

PART II--Effecciveness/Success (cont.)

Objective No. 2

5. Provide statistical evidence that the objective was attained at or above the criterion level(s) established for that objective.

Present evidence:

The analysis of data for the total scores showed that the experimental group gained 7.6 points overall from pretest to posttest while the control group lost 4.47 points. In other words, there was a difference of 12 points between experimental group and control group on the mean differences from pretest to posttest. When this was tested for significance using the t-ratio for independent groups, a t-ratio of 3.812 was obtained which was significant at the .001 level.

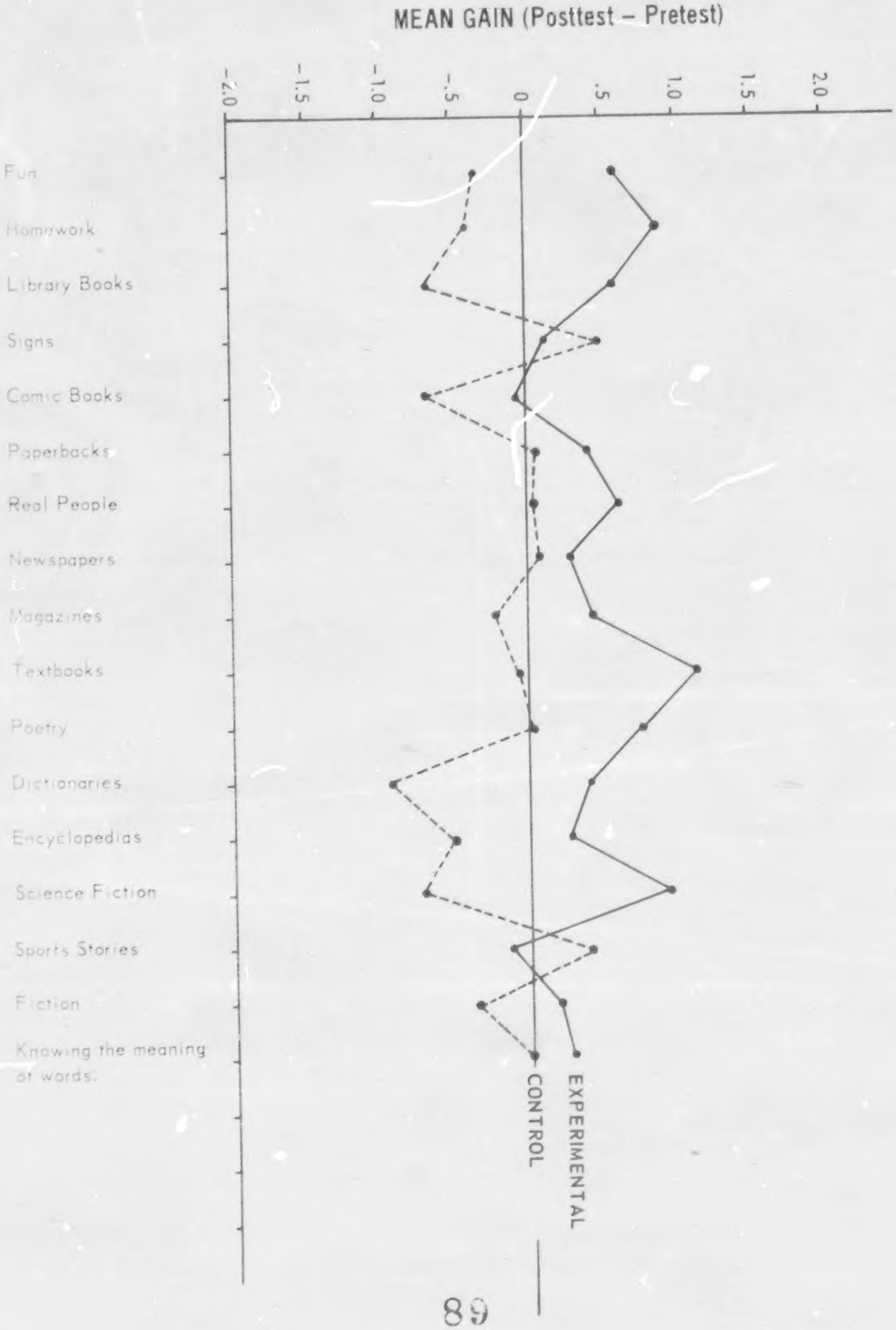
The results were then analyzed for significance by testing separately each concept that students were asked to rate. Of 17 concepts that were selected, most of the results showed that there was more attitudinal gain by the experimental group than by the control group. A summary of the results indicates that of the 17 concepts evaluated, seven of them showed significant gain for the experimental group over the control group. Eight others showed a gain for the experimental group over the control group that were not statistically significant, and 2 showed a difference in favor of the control group. In addition, the control group showed a loss in 10 concepts tested compared to a loss in only 2 concepts for the experimental group. These results are summarized in the table that follows. Immediately following the table is a graph depicting the gain/loss on the individual concepts evaluated.

37A
(Obj. 2)

SUMMARY OF TESTS OF SIGNIFICANCE SELECTED READING CONCEPTS AS MEASURED BY THE SEMANTIC DIFFERENTIAL

Concept	df	Mean Gain Scores		t	p
		Experimental	Control		
Reading for Fun	331	.659	- .345	2.621	.01
Reading for Homework	331	.822	- .352	2.656	.01
Reading Library Books	331	.649	- .713	3.422	.001
Reading Signs	128	.257	.500	.336	N.S.
Reading Comic Books	331	- .091	- .713	3.422	.001
Reading Paperbacks	330	.454	.117	.723	N.S.
Reading about real people	329	.605	.102	1.177	N.S.
Reading Newspaper	330	.352	.125	.564	N.S.
Reading Magazines	330	.482	- .237	1.449	N.S.
Reading Textbooks	331	1.192	- .088	2.580	.02
Reading Poetry	330	.704	.058	1.371	N.S.
Reading Dictionaries	201	.406	- .973	2.449	.02
Reading Encyclopedias	202	.377	- .519	1.552	N.S.
Reading Science Fiction	201	.968	- .763	2.933	.01
Reading Sports Stories	201	- .141	.447	1.120	N.S.
Reading Fiction	204	.299	- .311	1.004	N.S.
Knowing the meaning of words	127	.304	.000	.434	N.S.
Total Scores	321	7.613	-4.470	3.812	.001

37B
(Obj. 2)


MEAN GAIN (Posttest – Pretest)
-2.0
-1.5
-1.0
-.5
0
.5
1.0
1.5
2.0
Fun
Homework
Library Books
Signs
Comic Books
Paperbacks
Real People
Newspapers
Magazines
Textbooks
Poetry
Dictionaries
Encyclopedias
Science Fiction
Sports Stories
Fiction
Knowing the meaning of words.
CONTROL
EXPERIMENTAL

The following attendance data are submitted as supporting data to support the hypothesis that attitudes were improved by participation in the IRIS program. It can be noted that at each grade level, attendance was considerably better in the experimental group when compared to the control group.

SUMMARY OF ATTENDANCE DATA
IRIS READING PROJECT
1974-75

	Grade	# of Students	Total Days Enrolled	Total Days Absent	Per cent
Control	3	26	3900	160	4.1
	4	15	2250	94	4.1
	7	38	5700	286	5.0
	9	34	5005	420	8.3
Experimental	3	22	3270	121	3.7
	4	24	3600	119	3.3
	7	36	5400	207	3.8
	9	65	9578	622	6.4

PART II--Effectiveness/Success (cont.)

Objective No. 2

6. In addition to previously cited statistical evidence provide evidence of educational significance of the reported findings.

Present evidence:

The observations of the director, reading coordinator, and the evaluator indicate that the students responded well to the program. In those situations where they were able to manipulate sections of the Lab for themselves, it was noted that the students reacted positively. Listed below are verbal comments of the students in their response to the kit and the use of it in their reading program.

(1) An 8th grade student who is in his second year of the program discussed reading with our guidance counselor. He said, "I know the reading classes have helped me although I still don't read as well as I should for my age. Now I can figure out a long word if I don't try to go too fast, and I don't stutter anymore when I read aloud."

(2) A seventh grader remarked while examining the progress charts, "I'm about to run off the chart. Can I still come to reading class next year if I finish everything?"

(3) A bright handsome boy with a severe reading handicap said, "My favorite thing to do in reading class is to read a book that has a record or a tape to go with it. It goes so much faster that I don't get tired before I really get into it. Call of the Wild and The Matchlock Gun were may favorites."

(4) After the posttest in the phonics area one girl observed, "It is kinda fun to know exactly how much you have improved."

(5) A boy said privately to the teacher while helping her set up the tape player for a group to use the Target tapes for a prefix drill, "These tapes are pretty dull, but you don't mind so much when you know exactly why you have to do them, and when you know, if you learn them, you won't do them again."

PART II--Effectiveness/Success (cont.)

Objective No. 2

7. State the conclusions which were drawn from the results reported.

State conclusions:

The objective was achieved when all concepts are considered together as a total attitudinal score. That is, when total scores are considered, the experimental group is superior to the control group in attitudinal gain during the course of the project. Too, when individual concepts are considered, the experimental group shows more favorable attitude in many more areas than does the control group. For example, there were fewer negative mean scores (losses in attitudinal scores) in the experimental group than in the control group where this was evidenced some 10 times on 10 separate concepts.

PART II-- Effectiveness/Success (cont.)

Objective No. 3

1. State each major objective to be validated on a separate set of Part II, Effectiveness/Success, forms. Number each objective for identification. From here on, identify the objective by its assigned number. You will need as many sets of Part II forms as there are objectives to be validated.

   Objectives should be stated in measurable terms reflecting who, upon completion of the project intervention (treatment), will be able to do what at what level of performance. Any objective not meeting the necessary specifications of measurability will be eliminated from further review, investigation and validation.

   State Objective:

   Teachers participating in the in-service education program for the IRIS project will demonstrate a significant gain (.05 level) in selected reading skills and knowledge as demonstrated by a pretest - posttest assessment using the Performance Competency Self Assessment for In-service Education.

PART II---Effectiveness/Success (cont.)

Objective No. 3

2. Provide evidence to justify the need for the objective under consideration by describing the needs assessment procedures and the related findings.

A direct relationship should exist between the identified needs and the anticipated behaviorial change defined by the major project objectives.

Description of needs assessment and findings:

The assessment of needs that was performed in the parish and used as a basis for the student needs in this program implies the need for teacher improvement in order to facilitate the gains in the reading achievement by the students. The Title III reading program is an innovative program requiring the use of many types of materials and it was necessary that teachers be familiar with a wide variety of reading approaches and reading techniques. During the preceding two years of program development, the teaching skills that would be needed became evident to the staff and faculty. It was from these evolved needs that the in-service program developed. The best evidence of the needs in this area would be the pretest that was administered to the teachers prior to the beginning of the in-service program. This was a self assessment pretest and the results can be seen in the table that follows. They are reported in percentage form; that is, the percentage of teachers that responded in each category on each of the separate skills or knowledge areas. An examination of these data indicate a need for a wide variety of increased knowledge and skills on the part of the faculty. The in-service program was built around these specific skills. An examination of the data indicates that less than one-fourth of the teachers judged themselves competent in any of the skills areas listed, while only a slightly larger per cent judged themselves to be fairly competent. The evidence indicates a justification for the in-service program that was conducted and for the skills and knowledge that were selected for the program.

PERFORMANCE COMPETENCY SELF-ASSESSMENT FOR IN-SERVICE EDUCATION

COMPETENCY	STRONGLY COMPETENT	FAIRLY COMPETENT	LITTLE OR NO COMPETENCE
1. Familiarity with professional organization devoted to reading education.	6%	38%	56%
2. Familiarity with professional journals in reading education.	6%	50%	44%
3. Familiarity with and can effect in the classroom findings of recent significant research in reading instruction.		17%	83%
4. Possess thorough knowledge of methods of reading instruction:			
a. Basal reading approach	17%	56%	27%
b. Veatch's individual approach	6%	16%	78%
c. i/t/a/ approach		17%	83%
d. Words in Color approach		11%	89%
e. Programmed approach		39%	61%
f. Fernald Method	6%	16%	78%
g. Language experience approach	6%	35%	59%
5. Understand and can teach a directed reading activity to an individual or small group of children.	18%	64%	18%
6. Understand language differences of, and can plan reading programs for, children who speak divergent dialects.		28%	72%
7. Have thorough knowledge of various word attack skills.	24%	52%	24%
8. Can structure individualized instructional materials designed to treat student weaknesses in specific reading skills.	12%	47%	41%
9. Can develop evaluation instruments to measure treatment for weaknesses in specific reading skills.	6%	38%	56%

PART II--Effectiveness/Success (cont.)

Objective No. 3

3. Briefly describe the intervention process for this objective including where appropriate the following elements: grade level(s), number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental community involvement, pre-service/in-service training, etc.

Describe activities for the attainment of the objective:

The intervention process for this objective involves an in-service program designed toward improving project personnel competencies in various phases of reading and individualized instruction. The in-service course designed for staff and faculty was taught by Dr. Mildred Bailey, Director of Reading at Northwestern State University. The course was built around the specific skills and knowledge as evaluated in Objective no. 3. (See the table in Part II, number 2) The course was designed for 18 weeks, meeting one afternoon a week for three (3) hours. In addition to the course on Individualizing of Reading Instruction, on-site in-service sessions were conducted by project personnel. These sessions in the schools were provided to familiarize the school staff and faculty with the use of the reading lab and also with new materials as they arrived and were distributed.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(a). Provide the evaluation design (pre - posttest, baseline data, posttest only, experimental control, etc.,) which, when implemented, will provide the information necessary to determine to what extent the objective was actually attained.

Describe evaluation design:

The evaluation design provided for this objective was a pretest - posttest assessment. Teachers were administered a pretest with a self evaluation device wherein they were to rate themselves as being competent, highly competent, fairly competent, or having little or no competence. This instrument was used also in a post assessment after the in-service director had provided training. Teachers who demonstrated the skill on the pretest were not required to participate in the training for that particular skill. Provision was made to test for statistical significance. The three (3) categories selected below for each question or each skills areas were tested for significant shifts toward competence from pretest to posttest; in other words, there was a 2 by 3 paradigm showing pretest and posttest on the rows and three (3) levels of skills in the columns.

LEVEL OF COMPETENCY

		Highly	Moderate	Low	
Test	PRE				Row Total
	POST				Row Total
		Column Total	Column Total	Column Total	Total Observations

The chi-square technique was used to test for statistical significance. The results of these tests of statistical significance can be found in the table that appears in Part II, number 5.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(b). For the objective under consideration, describe data collection procedures specifying type of data collected, method of data collection, timelines, responsible persons, etc., Chart format is suggested.

Describe the data collection procedures:

Person responsible	Dr. Mildred Bailey, Reading Instructor
Type of Instrument	Self assessment rating scale
Pretest date	September, 1974
Posttest date	December, 1974

The pretest and the posttest were administered in a group situation. Teachers were asked to rate themselves upon the ability and skills in the various areas. The person requiring the administering of the scale was present throughout the time of the testing. No unusual circumstances at either testing session were reported.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(c). If evaluation information was collected on a sampling of the project's participants, describe sampling technique. Give sampling size and evidence of representativeness.

If sampling procedure was not used, write "Not Applicable" (NA) below.

Describe sampling technique:

Sampling procedures were not used. All the teachers that were involved in the in-service program were tested. This involved 18 persons.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(d). Provide supporting evidence that the attainment of the objective can be attributed to the project intervention (treatment) activities.

Describe evidence of effectiveness:

In an in-service program such as occurred, the teachers were assessed by a pretest before the treatment and posttest followed the activity. It is assured, of course, in this situation, one expects a gain to occur and in many situations it is possible to attribute this gain to the actual intervention of the treatment. Teachers were not involved in any other in-service program during this time. There were no special programs offered for teachers in the area. None of the faculty took trips to conferences or workshops during this period of time. So any formal training that they received during the period of time from pretest to posttest occurred in the in-service program. It is evident from 4(b) that proper procedures were followed in data collection. So it is the conclusion of the evaluator and the project staff that the intervention of the in-service program is the primary contributor to the gain in skills evidenced by the faculty during this in-service program.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(e). Where control groups exist, describe how they were selected and give some indication of their equivalency to the project group.

If control groups were not used, write "not applicable" (NA) below.

Describe procedure, give evidence of equivalency:

Not Applicable

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(f). Identify and describe each instrument utilized in the evaluation. Instruments can be standardized or locally developed tests, questionnaires, interview forms, rating forms, inventories, etc. Include information concerning the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Identify and describe instrument:

The instrument that was used to assess Objective no. 3 was developed locally by the reading consultant in the project, Dr. Mildred Bailey. This instrument was brought to the project evaluator for evaluation and analysis. Some suggestions were made as to format and particular details of the instrument. The instrument was administered to the group. It was a rating scale requiring only a choice among three (3) alternatives by the participants. The stated skills and knowledge areas that were included represent a broad spectrum of skills and knowledge areas within the reading field. Dr. Bailey had worked in the project for two years previous to this year. She was familiar with the skills of the teacher. Also, Dr. Bailey was aware of the many skills needed by teachers to enable them to fully utilize the wide variety of materials found in the IRIS Reading Kit. Thus, the competencies selected were deemed necessary for the successful completion of the project. It is felt by the project evaluator that the instrument has content validity for the skills indicated. Since this is a rating scale it is subject to the weaknesses that are attributed to rating scales as to level of data and reliability of the responses of the participants. However it was the judgement of the evaluator and the reading consultant that a locally constructed instrument would provide a more suitable knowledge base by which to analyze the in-service program than would an instrument developed by persons at other institutions or standardized instruments which are not specific to the in-service program being evaluated.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(g). Give evidence that persons responsible for data collection (administration of tests, inventories, attitude scales, etc.) were qualified for their tasks. If any instrument utilized required special training or procedures, so indicate.

State qualifications and special training

Dr. Mildred Bailey was responsible for data collection for this objective. Dr. Bailey, a copy of whose credentials are included in this evaluation instrument, is well qualified for the task of administering reading tests and attitude scales related thereto. There was no special training required for the administration of this test. The staff and the evaluator are confident in the reliability and the skills of Dr. Bailey and the data collection procedures that were involved.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(h). Describe data verification procedures used to assure the accuracy of data for each objective. The descriptions should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Describe the procedures:

The tests were collected and given to the staff for scoring and for conversion to percentages. Each test was scored twice and the percentages were computed by printing calculator to assess the accuracy of these percentages. By having a duplication of scoring, the staff feels that the results are accurate as measured.

PART II--Effectiveness/Success (cont.)

Objective No. 3

4(i). Report the data analysis procedure(s) used in data treatment and interpretation. Include names of persons or agencies responsible for data analysis.

Describe procedures:

The scores were given to the evaluator for data analysis. Each set of scores from pretest and posttest were combined into a 2 by 3 chi-square design as illustrated in Part II, 4(e). The rows represented pretest and posttest. The columns represented the three (3) levels of competency into which the teachers had rated themselves. The number of respondents in each category was used as the base data. The chi-square technique was used to analyze for statistical significance. Data analysis and interpretation was the responsibility of Dr. Otis Cox. The results of the data analysis of the chi-square test of significance can be found in the table accompanying Part II, number 5.

PART II--Effectiveness/Success (cont.)

Objective No. 3

5. Provide statistical evidence that the objective was attained at or above the criterion level(s) established for that objective.

Present evidence:

Statistical evidence of the attainment of the objective is found in the table that follows. An analysis of these data indicates that the gains made were statistically significant in each of the skills and knowledge areas that were tested. The chi-square results range from a low of 8.577 in word attack skills which was significant at the .02 level to a chi-square of 29.23 in knowledge of words in Color approach. Most of the statistical results in the table were significant at the .001 level. These data indicate to the evaluator that the in-service program was successful in its goals of providing a broad range of skills and knowledge for the faculty.

TESTS OF SIGNIFICANCE

PERFORMANCE COMPETENCY SELF-ASSESSMENT FOR IN-SERVICE EDUCATION

COMPETENCY	CHI-SQUARE	LEVEL OF SIGNIFICANCE
1. Familiarity with professional organization devoted to reading education.	14.724	.001
2. Familiarity with professional journals in reading education.	21.188	.001
3. Familiarity with and can effect in the classroom findings of recent significant research in reading instruction.	25.755	.001
4. Possess thorough knowledge of methods of reading instruction:		
a. Basal reading approach	14.686	.001
b. Veatch's individual approach	23.212	.001
c. i/t/a/ approach	26.765	.001
d. Words in Color approach	29.230	.001
e. Programmed approach	20.250	.001
f. Fernald Method	21.072	.001
g. Language experience approach	18.797	.001
5. Understand and can teach a direct reading activity to an individual or small group of children.	26.000	.001
6. Understand language differences of, and can plan reading programs for, children who speak divergent dialects.	22.250	.001
7. Have thorough knowledge of the various word attack skills.	8.577	.02
8. Can structure individual instructional materials designed to treat weaknesses in specific reading skills.	18.492	.001
9. Can develop evaluation instruments to measure treatment for weaknesses in specific reading skills.	18.332	.001

PART II--Effectiveness/Success (cont.)

Objective No. 3

6. In addition to previously cited statistical evidence provide evidence of educational significance of the reported findings.

Present evidence:

More and more in the field of education it is required of teachers that they be knowledgeable in the area of reading and possess a wide range of skills. No longer are teachers confined to teaching from a basal text but rather are exploring wide sources of materials to help students on an individual basis. It is, therefore, encouraging to see a large group of teachers such as these make such substantial gains in these skills areas and this should represent a substantial improvement to themselves as teachers and to their contribution to the educational setting. No longer will they have to rely on particular reading approaches that they were trained in as undergraduates and on previous degree programs. Rather, they can explore all the reading materials that are available to them through this instructional system and make use of them to their fullest. It is the evaluator's judgement that this is a meaningful approach to the area of reading since research shows that not one reading method is superior over another but rather employment of a variety of techniques seems to be the best approach.

PART II--Effectiveness/Success (cont.)

Objective No. 3

7. State the conclusions which were drawn from the results reported.

State conclusions:

Conclusions based upon the evidence presented to show the attainment of objective no. 3 are as follows:

(1) The teachers made significant and substantial gains in knowledge and skills based upon their in-service program.

(2) In-service training is a necessary component in the implementation of new programs.

PART II-- Effectiveness/Success (cont.)

Objective No. 4

1. State each major objective to be validated on a separate set of Part II, Effectiveness/Success, forms. Number each objective for identification. From here on, identify the objective by its assigned number. You will need as many sets of Part II forms as there are objectives to be validated.

Objectives should be stated in measurable terms reflecting who, upon completion of the project intervention (treatment), will be able to do what at what level of performance. Any objective not meeting the necessary specifications of measurability will be eliminated from further review, investigation and validation.

State Objective:

Teachers participating in the IRIS program will show a significant increase (.05 level) in attitude toward use of the basic components of the IRIS Reading Kit as measured by the Teacher Appraisal of the IRIS Reading Kit.

PART II--Effectiveness/Success (cont.)

Objective No. 4

2. Provide evidence to justify the need for the objective under consideration by describing the needs assessment procedures and the related findings.

A direct relationship should exist between the identified needs and the anticipated behaviorial change defined by the major project objectives.

Description of needs assessment and findings:

In the needs assessments section for Objectives No. 1 and No. 2, a large quantity of data were cited justifying the need for a reading improvement program in Rapides Parish. Based upon these data, the staff decided on a novel approach to reading, a computer-managed reading system - an individualized approach based upon the use of many types of materials and the computer to managed these materials for the teacher. In order to bring this about, it was not only necessary to develop the kit to be used but also to train teachers to use the kit. Thus it is within this area that the staff feels justified in an extensive in-service training program. Not only must the teachers know how to use the kit, but they also must have a favorable attitude toward using it. An analysis of the pretest scores indicated that there was need for improvement in teacher attitude toward use of the instructional kit. This was the basis for the assessment of attitudes of the teachers toward the components of the kit. The kit was comprised mainly of three basic parts: (1) diagnostic tests, (2) materials retrieval manual and (3) criterion-referenced tests. Thus the examination of this objective took place in terms of those components.

PART II--Effectiveness/Success (cont.)

Objective No. 4

3. Briefly describe the intervention process for this objective including where appropriate the following elements: grade level(s), number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental community involvement, pre-service/in-service training, etc.

Describe activities for the attainment of the objective:

In the third year of the in-service program intervention was, as far as teacher training was concerned, comprised of instruction provided by Dr. Mildred Bailey of Northwestern State University in the form of an in-service course for staff and faculty. This course was supplemented by the on-site in-service sessions by Mr. Gatlin, Project Director, and Mrs. Parks, Reading Coordinator to the project. The course was built around the specific skills and knowledge as evaluated in objective #3. The in-service sessions in the schools were provided to further familiarize the project personnel with the use of the kit and also with new materials as they arrived and were distributed.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(a). Provide the evaluation design (pre - posttest, baseline data, posttest only, experimental control, etc.,) which, when implemented, will provide the information necessary to determine to what extent the objective was actually attained.

Describe evaluation design:

In evaluating Objective No. 4, a pretest-posttest was used. The evaluation instrument was used at the beginning of the project to assess teacher attitudes toward the diagnostic tests, materials retrieval manual, and criterion referenced tests. Assessment was also made later in the school year to assess any change in attitude toward these 3 basic components as they continued to use these components within the project. The baseline data for the assessment was of course the pretest and the type of data that was gathered was ordinal. The analysis to be conducted here was analysis of variance of ranks using the Friedman two-way analysis of variance technique.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(b). **For the objective under consideration, describe data collection procedures specifying type of data collected, method of data collection, timelines, responsible persons, etc., Chart format is suggested.**

Describe the data collection procedures:

Data were collected early in the project year in a pretest using a Likert-type scale on each of the 3 basic components of the project. Diagnostic tests, the materials retrieval manual, and the criterion referenced tests were each assessed on a five point scale. Later in the project year, prior to the preparation of the validation report, a posttest was administered to assess the attitudinal change of the individuals involved. Mr. Gatlin, Project Director, and Mrs. Parks, Reading Coordinator for the project, were responsible for gathering data. The type of data obtained was ordinal.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(c). If evaluation information was collected on a sampling of the project's participants, describe sampling technique. Give sampling size and evidence of representativeness.

If sampling procedure was not used, write "Not Applicable" (NA) below.

Describe sampling technique:

Sampling was not used in the evaluation of this objective. All the persons involved were tested both pre and post. This section is not applicable.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(d). Provide supporting evidence that the attainment of the objective can be attributed to the project intervention (treatment) activities.

Describe evidence of effectiveness:

The teachers involved in this project participated in the in-service program and used the IRIS reading kit in their instructional program. No other major professional activities were involved that could provide learning in this area or could have promoted the attitudinal change. It is felt by the staff and the evaluator that whatever changes occurred were due mainly to the involvement of the teacher with the instructional program and with the in-service program accompanying it. By pre-post assessment of the gain that was made during that period of time, it is felt that changes that occurred can reliably be attributed to the work with the program and with the involvement in the in-service phase.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(e). Where control groups exist, describe how they were selected and give some indication of their equivalency to the project group.

If control groups were not used, write "not applicable" (NA) below.

Describe procedure, give evidence of equivalency:

This section is not applicable in that a pre-post designed with experimental group only was used.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(f). Identify and describe each instrument utilized in the evaluation. Instruments can be standardized or locally developed tests, questionnaires, interview forms, rating forms, inventories, etc. Include information concerning the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Identify and describe instrument:

The instrument used for this assessment, the Teacher Appraisal of the IRIS Reading Kit, employs a Likert-type scale for each of the 3 areas of the kit that was assessed. Those 3 areas were diagnostic tests, materials retrieval manual, and criterion-referenced tests. As the instrument was locally developed, it was not standardized on any other population. The data was ordinal and was tested as ordinal data using the Friedman 2-way analysis of variance of ranks technique. The teachers were asked to rate the basic components of the kit. The staff and evaluator feels that this means was as effective as any available for assessing the gain in attitude toward these basic components. It was not possible to use an externally developed instrument.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(g). Give evidence that persons responsible for data collection (administration of tests, inventories, attitude scales, etc.) were qualified for their tasks. If any instrument utilized required special training or procedures, so indicate.

State qualifications and special training

The persons who were responsible for data collection were qualified for their tasks. The data collection was supervised by the project evaluator. Instruction was given to Mr. Gatlin, Project Director, and Mrs. Parks, Reading Coordinator. The instrument used required no special training to administer or score. Scoring was supervised and verified for accuracy.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(h). Describe data verification procedures used to assure the accuracy of data for each objective. The descriptions should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Describe the procedures:

Data verification procedures included the rescoring of tests by sampling and a check of the recording of the scores on the control sheet by sampling procedures also. The scores were converted to rank order data by the project evaluator, and the computation of the statistical technique was performed twice by electronic calculator to assure accuracy.

PART II--Effectiveness/Success (cont.)

Objective No. 4

4(i). Report the data analysis procedure(s) used in data treatment and interpretation. Include names of persons or agencies responsible for data analysis.

Describe procedures:

The scores from the rating scales were converted to ranks; that is it was indicated whether a person ranked higher on the pretest than on the posttest, etc. These ranks were then tested for statistical significance by use of the Friedman two-way analysis of variance of ranks technique. Dr. Otis Cox, Project Evaluator, performed the analysis of these data. The result of these analyses were presented in Part II, No. 5, which follows.

PART II--Effectiveness/Success (cont.)

Objective No. 4

5. Provide statistical evidence that the objective was attained at or above the criterion level(s) established for that objective.

Present evidence:

In the table that follows can be found the results of the statistical analysis of this objective. The Friedman two-way analysis of variance of ranks technique used resulted in a chi-square value to be tested. In the test of each of the 3 components of the kit, the attitudinal change in favor of use of the components of the kit was favorable and significant at the .001 level. Since it was anticipated to accept as being statistically significant any result significant beyond the .05 level, these results are even more meaningful. The test of significance of differences in attitude toward the diagnostic tests resulted in a chi-square of 21.33 in favor of more positive attitudes by the end of the experimental period. The test of attitudinal change toward the use of the materials retrieval manual resulted in a chi-square value of 16.33 in favor of more positive attitudes resulting by the end of the experimental period. Also, the test of attitudinal change regarding the criterion referenced tests resulted in a chi-square value of 14.81 in favor of a more positive attitude resulting from the experimental treatment. In all 3 cases, therefore, the teachers became more favorably disposed toward the use of the kit as they used it.

37A
(Obj. 4)

TESTS OF SIGNIFICANCE OF DIFFERENCES OF RANKS
FACULTY ATTITUDES TOWARD COMPONENTS OF THE KIT
FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE OF RANK

COMPONENT	χ_r^2	LEVEL OF SIGNIFICANCE
1. Diagnostic Tests	21.33	.001
2. Retrieval Manual	16.33	.001
3. Criterion Tests	14.81	.001

PART II--Effectiveness/Success (cont.)

Objective No. 4

6. In addition to previously cited statistical evidence provide evidence of educational significance of the reported findings.

Present evidence:

While it is always rewarding to report statistical significance in favor of an experimental program having positive effect on the students involved, an additional educational benefit is the acceptance of this program by the teachers that are involved. It is evident to any one that if teachers do not accept a program, then, regardless of its benefit to students, the program will be less than effective when implemented. The overall acceptance of the use of these materials as well as toward the total program involved indicates that the program has been having a very positive effect on the teachers involved and consequently will be accepted by others when exported.

PART II--Effectiveness/Success (cont.)

Objective No. 4

7. State the conclusions which were drawn from the results reported.

State conclusions:

The conclusions to be drawn from analysis of the data for this objective are:

a. The program is successful as rated by the teachers involved.

b. Teachers respond positively to the use of all elements within the program.

Part III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Option I

FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT HAVING A COMPUTER

Objectives addressed by the practice:

1. Objective 1
2. Objective 2
3. Objective 3
4. Objective 4

Unit of Intervention: Twelve "IRIS" Labs for twelve teachers serving 300 students in grades (2-10) three (3) hours per week for 180 days.

	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
200 Instruction						
200 Salaries						
212 - Staff Supervisor (½ time)			$ 3,250.00		$ 3,250.00	
216 - Teacher Aides (3 @ $3,000.00)					$ 9,000.00	
200 Contracted Service						
250 - Two consultants for two days of staff development @ $200.00 per day.	$ 800.00					
250 - Two consultants for two half day workshops @ $200.00 per day.			$ 200.00		$ 200.00	

ITEM	START-UP COSTS PRODUCER	START-UP COSTS ADOPTER*	MANAGEMENT COSTS PRODUCER	MANAGEMENT COSTS ADOPTER*	OPERATIONAL COSTS* PRODUCER	OPERATIONAL COSTS* ADOPTER*
	$	$	$	$	$	$
200 Other						
250A - Materials & Supplies						
- 12 sets of project materials for 12 teachers and 300 students	$1,152.00				$ 531.00	
- Material for computer monitoring reports.					$ 172.00	
250C - In-service						
- Two days of training @ $25.00 per day for 12 teachers.	$ 600.00					
- Two half day workshops @ $12.50 per half day for 12 teachers.			$ 150.00		$ 150.00	
TOTAL	$ 2,552.00		$ 3,600.00		$13,303.00	

* Operational cost are not inflated in the adoption of the IRIS Reading Management System since a school district will have facilities, equipment, materials, staff, etc., necessary through regular educational programming; however, a rearrangement of educational and financial priorities would be necessitated.

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.)

Option I

FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT HAVING A COMPUTER

	Start-up Costs	Management Costs	Operational Costs
a. Staff Development			
Start-up Cost			
Two days of training @ $25.00 per day for 12 teachers. Training supplied by demonstration staff.	$ 600.00		
Management Cost			
Two half day workshops @ $12.50 per half day for 12 teachers.		$ 150.00	$ 150.00
b. Materials			
Start-up Cost			
12 IRIS Labs @ $68.00* per Lab (4 level I, 4 level II, 4 level III) (1 lab per teachers per 25 students and/or Total - 300 Students.	$ 816.00		$ 531.00
In-service material for 12 teachers. - Programmed Word Attack for Teacher - Preparation of Behaviorial Objectives	$ 36.00		
Data Processing object programs and Instruction	$ 115.00		
Data tapes (Rapides Parish Materials Retrieval Manual)	$ 115.00		
Two part carbon paper for computer printing (12 manuals - $70.00) **	$ 70.00		

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* Price of Material Manual included with 12 labs

** Refer to attached explanation

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.)

	Start-up Costs	Management Costs	Operational * Costs
Two part carbon paper for computer Monitoring reports (300 students $160.00)			$ 160.00
Computer cards (10,000 - $12.00)			$ 12.00
c. Facilities - No cost			
d. Constracted Service			
Start-up Cost			
Two consultants for two days of staff development @ $200.00 per day	$ 800.00		
Two consultants for two ½ day workshops @ $200.00 per day.		$ 200.00	$ 200.00
e. Equipment - No cost			
f. Travel - No cost			
g. Other			
Staff Supervisor - (½ time)		$ 3,250.00	$ 3,250.00
Teacher Aides (3) @ $3,000.00			$ 9,000.00
h. Total start-up, operational, and management columns to obtain the total cost of the practice	$ 2,552.00	$ 3,600.00	$13,303.00
i. Total number of learners upon which costs were based.		300	300
j. Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.	$ 8.51	$ 12.00	$ 44.34

* Operational cost are not inflated in the adoption of the IRIS Reading Management System since a school district will have facilities, equipment, materials, staff, etc., necessary through regular educational programming; however, a rearrangement of educational and financial priorities would be necessitated.

ATTACHMENT

1 - IRIS Lab complete:

Lab Level 1 (2-4) Lab Level 2 (3-6) Lab Level 3 (6-12)

$ 5.00	1	Computer Printed Materials Manual (paper)
4.81	1	Phonics Test Manual
4.81	1	Structural Test Manual
6.10	25	Student Diagnostic Tests - Phonics
4.74	25	Student Diagnostic Tests - Structural
17.75	1	Set of Criterion Referenced Tests - Phonics
11.98	1	Set of Criterion Referenced Tests - Structural
3.98	1	Instructional Manual for IRIS Lab
1.80	2	Phonics Progress Chart
1.30	2	Structural Progress Chart
.48	1	Pad (50 sheets) Individual Prescription Forms
1.73	1	Box
3.40	2	Sets Binders for Materials Manual
$67.88		

The IRIS program is workable in conventional school situations. For this reason it is assumed that costs for basic facilities, equipment, and materials are part of a regular educational program of a school and probably will not change with the introduction of the IRIS reading program. The other costs of staff training, materials, etc., recommended by the producer are listed in the resource specifications section.

A consumer district will be responsible for the stipends for teachers, or salaries of their substitutes during the training periods. Any stipends for consultants other than the producer staff will also be the responsibility

of the consumer district.

A program coordinator who supervises and monitors the replicated program should be a full time educator with half time assignments to IRIS program.

The cost estimates for an adoptor in this section are for twelve (12) IRIS Labs with computer management components, for twelve (12) teachers serving three hundred (300) students.

Part III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Option II

FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT RENTING OR CONTRACTING COMPUTER SERVICES

Objectives addressed by the practice:

1. Objective 1
2. Objective 2
3. Objective 3
4. Objective 4

Unit of Intervention: Twelve "IRIS" Labs for twelve teachers serving 300 students in grades (2-10) three (3) hours per week for 180 days.

	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL CO	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER
	$	$	$	$	$	$
200 Instruction						
200 Salaries						
212 - Staff Supervisor (½ time)			$ 3,250.00		$ 3,250.00	
216 - Teacher Aides (3 @ $3,000.00)					$ 9,000.00	
200 Contracted Services						
250 - Two consultants for two days of staff development @ $200.00 per day.	$ 800.00					
250 - Two consultants for two half day workshops @ $200.00 per day.			$ 200.00		$ 200.00	

43A
(Op. II)

	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS *	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
250 - Data Processing	$ 290.00		$ 750.00		$ 240.00	
200 Other						
250A - Materials & Supplies						
- 12 sets of project materials for 12 teachers and 300 students.	$ 1,140.00				$ 531.00	
250C - In-service						
- Two half day workshops @ $12.50 per half day for 12 teachers.			$ 150.00		$ 150.00	
TOTAL	$ 2,830.00		$ 4,350.00		$13,371.00	

* Operational cost are not inflated in the adoption of the IRIS Reading Management System since a school district will have facilities, equipment, materials, staff, etc., necessary through regular educational programming; however, a rearrangement of educational and financial priorities would be necessitated.

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.)

Option II

FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT RENTING OR CONTRACTING COMPUTER SERVICES

	Start-up Costs	Management Costs	Operational Costs
a. Staff Development			
Start-up Cost			
Two days of training @ $25.00 per day for 12 teachers. Training supplies by demonstration staff.	$ 600.00		
Management Cost		$ 150.00	$ 150.00
Two half day workshops @ $12.50 per half day for 12 teachers			
b. Materials			
Start-up Costs	$ 1,104.00		$ 531.00
12 IRIS Labs @ $92.00* per Lab (4 level I, 4 level II, 4 level III) (1 lab per teacher per 25 students)			
In-service materials for 12 teachers	$ 36.00		
- Programmed Word Attack for Teachers - Preparing Behavioral Objectives			
c. Facilities - no cost			
d. Contracted Service			
Start-up			
1. Two consultants for two days of staff development @ $200.00 per day.	$ 800.00		

* Price of materials retrieval manual included with 12 labs.

	Start-up Costs	Management Costs	Operational Costs
Two consultants for two half day workshops @ $200.00 per day.		$ 200.00	$ 200.00
2. Data Processing	$ 290.00		
- object programs and instructions ($115.00)*			
- Data Tapes (Rapides Parish Materials Retrieval Manual $115.00) **			
- Monitoring System ($ .20 per student set up; 300 students $60.00)			
Maintenance			
1. Data Processing			
- Updating Materials Retrieval Manual. ($ .15 per treatment entry; 5,000 treatments $750.00) ***		$ 750.00	
- Monitoring System ($ .80 per student; 300 students $240.00)			$ 240.00
- Teacher Aides 3 @ $3,000.00			$ 9,000.00
- Staff Supervisor (½ time)		$ 3,250.00	$ 3,250.00
e. Equipment - no cost ****			
f. Travel - no cost			
g. Other			
h. Total start-up, operational, and management columns to obtain the total cost of the practice.	$2,830.00	$ 4,350.00	$ 13,371.00
i. Total number of learners upon which costs were based.	300	300	300

44B
(Op. II)

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.)

	Start-up Costs	Management Costs	Operational Costs
j. Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.	$ 10.43	$ 14.50	$ 44.57

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* Conversion cost to compatible machine $40.00 per hr.
** $30.00 per material retrieval manual after initial printing
*** Based on 20% annual renewal over 5 years
**** See attachment that follows
***** Operational cost are not inflated in the adoption of the IRIS Reading Management System since a school district will have facilities, equipment, materials, staff, etc., necessary through regular educational programming; however, a rearrangement of educational and financial priorities would be necessitated.

ATTACHMENT

1 - IRIS Lab complete:

Lab Level 1 (2-4) Lab Level 2 (3-6) Lab Level 3 (6-12)

$ 30.00	1	Computer Printed Materials Manual
4.81	1	Phonics Test Manual
4.81	1	Structural Test Manual
6.10	25	Student Diagnostic Tests - Phonics
4.74	25	Student Diagnostic Tests - Structural
17.75	1	Set of Criterion Referenced Tests - Phonics
11.98	1	Set of Criterion Referenced Tests - Structural
3.98	1	Instructional Manual for IRIS Lab
1.80	2	Phonics Progress Chart
1.30	2	Structural Progress Chart
.48	1	Pad (50 sheets) Individual Prescription Forms
1.73	1	Box
3.40	2	Sets Binders for Materials Manual
$ 92.88		

The IRIS program is workable in conventional school situations. For this reason it is assumed that cost for basic facilities, equipment, and materials are part of a regular educational program of a school and probably will not change with the introduction of the IRIS reading program. The other costs of staff training, materials, etc., recommended by the producer are listed in the resource specifications section.

A consumer district will be responsible for the stipends for teachers, or salaries of their substitutes during the training periods. Any stipends for consultants other than the producer staff will also be the responsibility

of the consumer district.

A program coordinator who supervises and monitors the replicated program should be a full time educator with half time assignments to IRIS program.

The cost estimates for an adoptor in this section are for twelve (12) IRIS Labs with computer management components, for twelve (12) teachers serving three hundred (300) students.

Part III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Option III

FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT NOT USING COMPUTER SERVICES

Objectives addressed by the practice:

1. Objective 1
2. Objective 2
3. Objective 3
4. Objective 4

Unit of Intervention: Twelve "IRIS" Labs for twelve teachers serving 300 students in grades (2-10) three (3) hours per week for 180 days.

	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL CO	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOP
	$	$	$	$	$	$
200 Instruction						
200 Salaries						
212 - Staff Supervisor (½ time)			$ 3,250.00		$ 3,250.00	
216 - Teacher Aides (3 @ $3,000.00)					$ 9,000.00	
200 Contracted Services						
250 - Two consultants for two days of staff development @ $200.00 per day.	$ 800.00					
250 - Two consultants for two half day workshops at $200.00 per day.			$ 200.00		$ 200.00	

43A
(Op. III)

	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
200 Other						
250A - Materials & Supplies						
- 12 sets of project materials for 12 teachers and 300 students	$ 1,056.28				$ 531.00	
250C - In-service						
- Two days of training @ $25.00 per day for 12 teachers.	$ 600.00					
- Two half day workshops @ $12.50 per half day for 12 teachers.			$ 150.00		$ 150.00	
TOTAL	$ 2,456.28		$ 3,600.00		$13,131.00	

* Operational cost are not inflated in the adoption of the IRIS Reading Management System since a school district will have facilities, equipment, materials, staff, etc., necessary through regular educational programming; however, a rearrangement of educational and financial priorities would be necessitated.

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.)

Option III

FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT NOT USING COMPUTER SERVICES

	Start-up Costs	Management Costs	Operational Costs
a. Staff Development			
Start-up Cost			
Two day of training @ $25.00 per day for 12 teachers. Training supplied by demonstration staff.	$ 600.00		
Management Cost			
Two half day workshops @ $12.50 per half day for 12 teachers.		$ 150.00	$ 150.00
b. Materials			
Start-up Cost			
Four Level I Labs @ $ 401.52 Four Level II Labs @ 360.24 Four Level III Labs @ 258.52 Twelve Labs $1,020.28 *	$ 1,020.28		$ 531.00
In-service materials for 12 teachers - Programmed Word Attack for Teachers. - Preparation of Behavioral Objectives	$ 36.00		
c. Facilities * - No Cost			

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* Refer to attachment that follows

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.) (Op. III)

	Start-up Costs	Management Costs	Operational Costs
d. Contract Services			
- Two consultants for two days of staff development @ $200.00 per day.	$ 800.00		
- Two consultants for two ½ day workshops @ $200.00 per day.		$ 200.00	$ 200.00
e. Equipment - No cost			
f. Travel - No Cost			
g. Other			
- Staff Supervisor (½ time)		$ 3,250.00	$ 3,250.00
- Teacher aides 3 @ $3,00.00			$ 9,000.00
h. Total the start-up, operational and management columns to obtain the total of cost of the practice	$ 2,456.28	$ 3,600.00	$ 13,131.00
i. Give total number of learners upon which costs were based.	300	300	300
j. Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.	$ 8.19	$ 12.00	$ 43.77

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* Operational cost are not inflated in the adoption of the IRIS Reading Management System since a school district will have facilities, equipment, materials, staff, etc., necessary through regular educational programming; however, a rearrangement of educational and financial priorities would be necessitated.

ATTACHMENT

1 - IRIS Lab complete on each level:

Level I	Level II	Level III		
$ 57.50	$ 47.18	$ 21.75	1	Computer Printed Materials Manual Commercially Printed
4.81	4.81	4.81	1	Phonics Test Manual
4.81	4.81	4.81	1	Structural Test Manual
6.10	6.10	6.10	25	Student Diagnostic Tests - Phonics
4.74	4.74	4.74	25	Student Diagnostic Tests - Structural
17.75	17.75	17.75	1	Set Criterion-Referenced Tests - Phonics
11.98	11.98	11.98	1	Set Criterion-Referenced Tests - Structural
3.98	3.98	3.98	1	Instruction Manual for IRIS Lab
1.80	1.80	1.80	2	Phonics Progress Chart
1.30	1.30	1.30	2	Structural Progress Chart
.48	.48	.48	1	Pad (50 sheets) Individual Prescription Forms
1.73	1.73	1.73	1	Box
3.40	3.40	3.40	2	Sets Binders for Materials Manual
$100.38	$ 90.06	$ 64.63		
x 4	x 4	x 4		
$401.52	$360.24	$258.52		

This IRIS program is workable in conventional school situations. For this reason it is assumed that cost for basic facilities, equipment, and materials are part of a regular educational program of a school and probably will not change with the introduction of the IRIS reading program. The other costs of staff training, materials, etc., recommended by the producer are listed in the resource specifications section.

A consumer district will be responsible for the stipends for teachers, or salaries of their substitutes during the training periods. Any stipends for consultants other than the producer staff will also be the responsibility

of the consumer district.

A program coordinator who supervises and monitors the replicated program should be a full time educator with half time assignments to IRIS program.

The cost estimates for an adoptor in this section are for twelve (12) IRIS Labs with computer management components, for twelve (12) teachers serving three hundred (300) students.

Part III--Resource Specifications and Cost Estimation

Resource by Type and Amount

Option IV

FOR ADOPTING
ONLY THE TESTING PROGRAM OF THE IRIS READING MANAGEMENT SYSTEM

Objectives addressed by the practice:

1. Objective 1
2. Objective 2
3. Objective 3
4. Objective 4

Unit of Intervention: Twelve "IRIS" Labs for twelve teachers serving 300 students in grades (2-10) three (3) hours per week for 180 days.

	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL CO	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPT
	$	$	$	$	$	$
200 Instruction						
200 Salaries						
212 - Staff Supervisor (½ time)			$ 1,625.00		$ 1,625.00	
200 Contracted Services						
250 - One consultant for one day @ $200.00 per day.	$ 200.00					
250 - One consultant for one day @ $200.00 per day.			$ 100.00		$ 100.00	

	START-UP COSTS		MANAGEMENT COSTS		OPERATIONAL COSTS	
ITEM	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*	PRODUCER	ADOPTER*
	$	$	$	$	$	$
200 Other						
250A - Materials & Supplies						
- 12 sets of project materials for 12 teachers and 300 students	$ 687.24				$ 531.00	
250C - In-service						
- Two days of training @ $25.00 per day for 12 teachers.	$ 600.00					
- Two half day workshops @ $12.50 per half day for 12 teachers.			$ 150.00		$ 150.00	
TOTAL	$ 1,487.24		$ 1,875.00		$ 2,406.00	

* No operational costs (Same as Option I)

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.)

Option IV

FOR ADOPTING ONLY THE TESTING PROGRAM OF THE IRIS READING MANAGEMENT SYSTEM

	Start-up Costs	Management Costs	Operational Costs
a. Staff Development			
Start-up Cost	$ 600.00		
- Two days of training @ $25.00 per day for 12 teachers. Training supplied by demonstration staff.			
Management Cost			
- Two half day workshops @ $12.50 per half day for 12 teachers		$ 150.00	$ 150.00
b. Materials			
Start-up Cost			
- 12 sets IRIS tests @ $57.27* (4 level I, 4 level II, 4 level III. One set per teacher per 25 students)	$ 687.24		$ 531.00
c. Facilities - No Cost			
d. Contract services -			
- One consultant for one day @ $200.00 per day	$ 200.00		
- One consultant for one day @ $200.00 per day		$ 100.00	$ 100.00
e. Equipment - No cost			

* See attachment that follows

PART III--RESOURCE SPECIFICATIONS BY CATEGORY (cont.)

	Start-up Costs	Management Costs	Operational Costs *
f. Travel - No cost			
g. Other			
- Staff Supervisors (¼ time)		$ 1,625.00	$ 1,625.00
h. Total the start-up, operationsl and management columns to obtain the total cost of the practice.	$ 1,487.24	$ 1,875.00	$ 2,406.00
i. Give total number of learners upon which costs were based	300	300	300
j. Divide i into h and derive per learner costs for each column. To find continuation costs add operating costs to those management costs related to operations.	$ 4.96	$ 6.25	$ 8.02

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* Operational cost are not inflated in the adoption of the IRIS Reading Management System since a school district will have facilities, equipment, materials, staff, etc., necessary through regular educational programming; however, a rearrangement of educational and financial priorities would be necessitated.

ATTACHMENT

IRIS Testing program

Level 1 Level 2 Level 3

$ 4.81	1	Phonics Test Manual
4.81	1	Structural Test Manual
6.10	25	Student Diagnostic Tests - Phonics
4.74	25	Student Diagnostic Tests - Structural
17.75	1	Set of Criterion-Referenced Tests - Phonics
11.98	1	Set of Criterion-Referenced Tests - Structural
3.98	1	Instruction Manual for IRIS Lab
1.80	2	Phonics Progress Chart
1.30	2	Structural Progress Chart
$57.27	1	Set

The IRIS testing program is workable in conventional school situations. For this reason it is assumed that cost for basic facilities, equipment, and materials are part of a regular educational program of a school and probably will not change with the introduction of the IRIS reading program. The other costs of staff training, materials, etc., recommended by the producer are listed in the resource specifications section.

A consumer district will be responsible for the stipends for teachers, or salaries of their substitutes during the training periods. Any stipends for consultants other than the producer staff will also be the responsibility of the consumer district.

A program coordinator who supervises and monitors the replicated program should be a full time educator with ½ time assignment to the IRIS program.

The cost estimates for an adoptor in this section are for twelve (12) sets of IRIS tests for twelve (12) teachers serving three hundred (300) students.

PART IV--Exportability

A validated practice is exportable if (1) it is feasible to transport it to other school districts and (2) it can be adopted or adapted by other school districts with similar needs and environments. Used interchangeably with portable, replicable, and communicable. However, in this section questions 1-13 will be judged in terms of completeness of response. Only questions 14 & 15 in the validation section on pages 102 and 103 of the On-site Validation section require value judgments in terms of project's viability for dissemination.

1. Provide in the space below a description of the need for this project in other districts. (The purpose of this question is to determine the potential number of adopters for your program. You might include interest already shown in your project, results of State needs assessments, etc.) If the project can be adopted in part, the documentation of evidence should substantiate this for each applicable component.

(See report: Reading Highlights, 1974 for details of the Louisiana state needs assessment.)

A recent publication released by the Louisiana State Department of Education revealed reading to be the number one educational need in the State of Louisiana. This Louisiana state needs assessment prepared by the Louisiana Assessment of Educational Progress and Louisiana Right to Read isolated reading as the top priority among the most critical areas of curriculum concern. This report revealed that ample localized evidence of inadequate performance seems clear at the parish level. The Louisiana Assessment of Educational Progress report collaborated its findings in reading by noting that since the inception of Title I, "reading" has been invariably designated as the priority area of need by every parish and city school system state wide.

In the past year the project staff has received numerous requests from throughout the state of Louisiana and other states requesting information and materials relating to the project. Two school systems in the State of Louisiana have already replicated the entire testing program of our reading system and are using it system wide. Two additional systems have received information and materials and are in the process of putting it into their reading curriculum.

PART IV--Exportability (cont.)

2. Will the learner activities be continued with State or local funds? (Other than ESEA Title III)

YES X NO ____

Report evidence:

Components of the E.S.E.A. Title III project, Individualized Reading Instruction for Students, are being used this year in Rapides Parish in schools other than those schools directly involved in the development and testing of the project. Rapides Parish plans to involve all aspects of the program next year in Title I schools which will include 26 of the 52 parish schools and involve 3,500 students. This will be the first phase of implementing the program into our system.

RAPIDES PARISH SCHOOL BOARD
P. O. BOX 1230
ALEXANDRIA, LOUISIANA 71301

J. I. BARRON, JR.
PRESIDENT

ALLEN NICHOLS
SUPERINTENDENT

47A

April 4, 1975

Dr. Dan K. Lewis
Director, Experimental Programs
State Department of Education
Baton Rouge, Louisiana 70804

Dear Dr. Lewis:

This is to inform you that the Rapides Parish School Board plans to continue the Individualized Reading Instruction for Students Project upon the phasing out of Title III funding.

We will be pleased to provide a demonstration site for any who wish to see the program in action.

Sincerely,

Allen Nichols, Superintendent

AN/lb

PART IV--Exportability (cont.)

3. If the project is validated, and funded for dissemination, is the Board of Education willing to operate the project as a demonstration site (i.e., accept the role as a producer school. See definition.).

YES X NO ____

Report evidence:

The Rapides Parish School Board agrees to provide a demonstration site for the Title III IRIS project during the 1975-1976 school session in order that anyone who wishes to see the project in action may do so, provided that the staff time required for this purpose is funded by ESEA Title III. Proposed activities for the project's role as a demonstration site are:

Awareness Level Activities

A brochure which describes the program materials may be obtained from the project director. A Manual of Instructions describing the program in detail may also be obtained from the director.

The staff of the project will be available on a limited basis to give orientation presentations describing the program in Louisiana and other states. Interested parties in other states must coordinate a presentation with the state's ESEA Title III coordinator.

Involvement Level Activities

Visitors to the project will have the opportunity to meet the staff, see the program in a classroom, and examine the program materials. Visitors from other school districts are encouraged to come as a team, including a member of the Board of Education, Superintendent, principal, curriculum coordinator, and teachers.

Commitment Level Activities

School districts whose staff make a commitment to replicate the program are eligible for the training and follow-up consultation furnished by the staff. The site and dates for training will be arranged on an individual basis.

PART IV--Exportability (cont.)

4. Provide in the space below a detailed description of the target population (e.g., age, ethnic composition, income level, teacher experience, family, urban/rural).

Description:

The Rapides Parish school district's population can be generally classified as suburban. In the school district there are 31,000 school aged children with approximately 27,000 being enrolled in public schools. Of this 27,000, approximately 17,500 are white and 9,500 are black. The per capita income of the Parish as recorded in 1970 was $2,609.00. Approximately 40% of the public school enrollment comes from low income families. The schools in which the project is operating reflect the same ethnic composition, income level and other characteristics that describe the total school district. The following criteria are used for student enrollment in the district schools:

(1) Students entering school for the first time are required to submit a copy of their official birth record.

(2) Certification of students age upon entering is required. Children attaining the age of six on or before December 31 may enter regular school at the beginning of the term.

(3) Health records showing proof of immunization must be provided to the school at enrollment.

STAFFING PATTERN

The teacher-pupil ratio in the target population is representative of the school district's ratio of 1 to 27. Most elementary schools have self-contained classroom situations, several have open classroom concepts with many elementary schools having some variations of team teaching or departmentalization. Junior and senior high schools are basically departmentalized in scheduling.

State requirements establish courses for students and minimum time allotments.

Of the 25 teachers working in the project, teaching experience ranges from 3 to 34 years with 16 having their masters and above. All teachers hold a valid teaching certificate in their respective fields.

There are 7 aides in the Title III project. One aide is assigned to each school.

PART IV--Exportability (cont.)

5. Summarize in the chart below the learner involvement in the program you feel necessary for an adopter to obtain similar results.

Learner Involvement*

Check Appropriate Box

Regular School Day ☒

After School ☐

Summer ☐

Grade	Hours per session	Sessions per year	Hours per session	Sessions per year
Pre-K				
1				
2	2 hours	2		
3				
4	3 hours	2		
5				
6				
7				
8				
9				
10				
11				
12				
Adults				

*(The above information applies to the administration of the Pre and Post diagnostic tests to students)

PART IV--Exportability (cont.)

Learner Involvement*

Check Appropriate Box

Regular School Day ☒
After School ☐
Summer ☐

Grade	Hours per session	Sessions per year	Hours per session	Sessions per year
Pre-K				
1				
2	Minimum of 3 hours per week			
3				
4	Minimum of 3 hours per week			
5				
6				
7				
8				
9				
10				
11				
12				
Adults				

*(The above information applies to student treatments and criterion referenced testing)

PART IV--Exportability (cont.)

Learner Involvement*

Check Appropriate Box

Regular School Day ☒

After School ☐

Summer ☒

Grade	Hours per session	Sessions per year	Hours per session	Sessions per year
Pre-K				
1				
2			(Minimum of 6 hours initial in-service)	
3				
4				
5	2 hours	2		
6				
7				
8				
9				
10				
11				
12				
Adults				

*(The above information applies to in-service training of teachers, principals, aides, coordinators, volunteers, etc. involved in the program.)

PART IV--Exportability (cont.)

6. Describe the nature of the institutional variables (e.g., the school administration, teaching staff, physical facilities) which you feel would be critical to the success of the project in an adopting district.

Description:

Administration

District Coordinator

One administrator in the adopting school or school district must be the coordinator for the IRIS reading program. He must be knowledgeable of every aspect of the project and be able to give teachers and volunteers, etc., a full orientation to the program, organize and attend staff training workshops, and provide continual support and supervision to the teaching staff.

This person must be responsible for a periodic updating of project components and the periodic compilation of summary monitoring reports critical to the management aspect of the reading system.

The coordinator will act as a liaison between the IRIS project staff and the staff of the school district implementing the program. The coordinator should keep the Superintendent of Schools and the local Board of Education informed about the program and the impact it is having on student achievement.

Finally, the coordinator should disseminate general information about the program to the entire district staff and the community at large.

Principal

The principal must work closely with the coordinator in all aspects of the program. This must be done in order to give support in preparing for and installing the program. The principal's efforts in fostering the professional development of the teaching staff and to orient new staff members will be an important contribution to the overall success of the program.

Teaching Responsibilities

Teachers

Teachers should be responsible for the management of the IRIS reading system in their classrooms. This includes:

(1) Administering and scoring of diagnostic tests
(2) Determining skills deficiencies of individual students
(3) Writing prescriptions for treatment of identified skills deficiencies of individual students
(4) Posttesting for evaluation of student growth
(5) Compilation of data for periodic computer summary reports

The teacher must work with associates in a cooperative manner in planning and implementing the reading program. She should provide ongoing training to paraprofessionals.

Aides and Paraprofessionals

Aides and paraprofessionals should be involved in the following ways:

(1) Scoring of diagnostic tests
(2) Plotting student work on progress charts
(3) Gathering materials for prescribed instructional lessons
(4) Oversee children who are working with material assigned by teachers
(5) Administer criterion referenced tests

Staffing

The IRIS staff believes that the reading system can be used with virtually any kind of staffing organization beginning with a ratio of 1 coordinator per school district, 1 principal per school, and 1 teacher for every 25 students. It is felt that 1 aide per 4 teachers would enable a teacher to individualize instruction more extensively.

The way in which the staff is organized to use the program is more important than the number of persons on the staff.

Physical Facilities

The IRIS staff does not feel that any special physical facilities are required for success of the program. The IRIS reading system has been used successfully in both self-contained and laboratory situations. It is felt, however, that those potential adopters who could provide facilities for a reading laboratory setting could adopt the program more economically.

PART IV--Exportability (cont.)

7. Describe any community and home involvement critical to the success of the project (e.g., the necessity for parental and community participation, etc.)

Description:

Parent and community involvement are important to the success of the project in that people who are informed of the nature and benefits of a program will in turn support the program.

The ESEA Advisory Committee, consisting of parents, educators, civic leaders, etc., have periodically received information about the project and its effect on children in the participating schools. Parents and community were kept informed of the objectives of the project and its various successes through numerous newspaper articles, T. V. appearances, civic club presentations, parent-teacher groups, and a project newsletter.

Parents who hold teaching certification may volunteer time as tutors or as aides assisting children in order to free the teacher in her role as a classroom manager.

PART IV--Exportability (cont.)

8. Describe clearly and precisely the activities critical to the success of the project. These should be the project elements of your program which would have to be installed in another district for you to recognize the program as an adoption. If your project can also be adopted in part based on the separate objectives, cluster your responses by objective. Briefly discuss the pros and cons of partial adoption vs. full adoption of the program.

Description:

Option I

ESSENTIAL PROJECT ELEMENTS FOR ADOPTING THE TOTAL IRIS READING MANAGEMENT SYSTEM WITH A SCHOOL DISTRICT HAVING A COMPUTER

I. In-service

A. The first phase of the in-service program involves these basic areas:

(1) individualizing instruction
(2) behavioral objectives
(3) testing and evaluation
(4) classroom management techniques

B. The second phase of the in-service training includes a thorough understanding of each component of the IRIS reading management system including:

(1) diagnostic testing
(2) prescription writing and treatment
(3) criterion referenced testing
(4) utilization of all aspects of the monitoring system

Program personnel should be made aware of the various sytemized techniques of the IRIS computer-managed reading system.

C. The third phase of the in-service training will involve data processing techniques to update and maintain the system. These include the following activities:

(1) Procedures for tagging materials to update the materials retrieval manual.

(2) Familiarizing data processing personnel with the various aspects of the computer software package and/or any adaptations to existing hardware.

D. The following persons should be involved in the in-service training program:

(1) Member of the Board
(2) Superintendent of Schools or a representative
(3) School District Coordinator assigned to the program
(4) Principals
(5) Teachers, aides, and volunteers of the adopting system
(6) Data processing personnel

II. Testing

A. Diagnostic tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 10
(2) Structural Analysis - Grades 4 - 10

The diagnostic tests were constructed by the Title III personnel and staff as a pre and post assessment of needs and achievements. The tests were submitted to statistical analysis in order to determine an estimate of their effectiveness. Each test was developed with an acceptable performance for each student. This standard is essential for use of the test by the teacher to determine skills in which the student is deficient.

A manual of instructions is provided for each diagnostic test.

B. Criterion referenced tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12
(2) Structural Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12

Locally graded criterion referenced tests have been constructed by the Title III staff and personnel to evaluate the progress a student has made after treatment for specific reading deficiencies. Each test is printed and bound in pads of 25 copies. A teacher's copy is provided for each criterion test with instructions for administering the test, an answer key, and minimum acceptable levels established for success of performance.

Even though the diagnostic and criterion referenced tests were constructed for use with the IRIS reading management system, they have already been incorporated into the existing reading programs of several school districts in Louisiana.

III. Materials Retrieval Manual

The graded materials retrieval manuals were constructed with the use of a computer by researching numerous multi-media materials that provide treatment for specific skills in phonic and structural analysis. They provide the means for a teacher to quickly locate materials that will assist the student in overcoming his skills deficiencies. Each entry in the manual includes the following information:

(1) complete performance objectives for the skills of reading
(2) complete identification of numerous reading materials associated with each skill and exact location within the material
(3) rated levels of materials
(4) degree of involvement for teachers for each set of material
(5) sensory mode involved for instruction of material

Thus the teacher is free of much detail and will become an organized manager of the learning laboratory. The teacher refers to the retrieval manual kit and selects materials for each skill that are most appropriate to particular learner needs.

The existing Rapides Parish retrieval manuals can be replicated by another school district either by commercial printing or computer printing. They can be updated by deleting or adding other materials as a system's needs dictate. Prepared material tagging procedures and computer programs are available to systems desiring this service.

IV. Monitoring System

Monitoring forms provide the basis for a vital part of the computer-management reading system. Individual prescription forms, after use for classroom instruction, provide vital information about treatment of individual students. Information includes:

(1) actual reading level of student
(2) date of treatment
(3) performance objective and skills treated
(4) name of material and location

(5) evaluation of materials as successful or unsuccessful
(6) date criterion test is administered
(7) performance objective relating to the criterion test
(8) criterion test score and evaluation

The information from the individual prescription forms is keypunched and stored in the computer for printing of the following periodic monitoring summaries:

(1) individual student summaries showing objectives treated, materials used in treatment, and success of treatment
(2) class summaries showing objectives worked on by all students and the rate of success
(3) school summaries showing the rate of success of all classes in the school
(4) a system summary compiling data from schools
(5) a summary of all reading materials used in the system to treat reading objectives and an evaluation of each piece of material
(6) a criterion referenced test summary with an evaluation of each test by grades

Prepared computer programs on the monitoring system are available to those school districts wishing to use this phase of the program.

PART IV--Exportability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these terms of the previously determined critical program elements.

Option I

ESSENTIAL SOFTWARE FOR ADOPTING THE TOTAL IRIS READING MANAGEMENT SYSTEM WITH A SCHOOL DISTRICT HAVING A COMPUTER

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
I. In-Service					
A. Project Developed					
1. Preparation of Behavioral objectives (11 pages - $1.25)		X		One per teacher	Project
2. Instructional Manual ("IRIS" Lab) (10 pages - $3.89)		X		One per teacher	Project
3. Phonic Analysis Test (30 pages - $4.31)		X		One per teacher	Project
4. Structural Analysis Test Manual (30 pages - $4.31)		X		One per teacher	Project
5. "IRIS" Lab Level I for demonstration (all components - $104.31)		X		One per workshop group of 12	Project
6. "IRIS" Lab Level II for demonstration (all components - $104.31)		X		One per workshop group of 12	Project

Type of Materials	User: Student	User: Teacher	User: Others	Quantity Per Unit	Source
7. "IRIS" Lab Level III for demonstration (all components - $104.31)		X		One per Workshop Group of 12	Project
B. Commercial Publishers					
"Programmed Word Attack for Teachers" (Workbook for Teachers) (68 pages - $2.95)		X		One per teacher	Charles E. Merrill Pub. Co.
II. Testing					
A. Project Developed					
1. Phonic Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
2. Structural Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
3. Phonic Analysis - Diagnostic Test (14 pages - $ .22)	X			One per student	Project
4. Structural Analysis - Diagnostic Test (12 pages - $ .19)	X			One per student	Project
5. Criterion Referenced Tests	X			One set per Lab per level (25 students per Lab)	Project
(a) Phonic Analysis-Level I (Grades 2 - 4) 24 tests $11.12 score sheets 2.78 dividers 3.85 Total $17.75 per set					
(b) Phonic Analysis-Level II (Grades 5 - 6) 20 tests $11.06 score sheets 2.75 dividers 3.82 Total $17.63 per set					

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
(c) Phonic Analysis-Level III (Grades 7 - 12)					
20 tests $11.06 score sheets 2.75 dividers 3.82 Total $17.63 per set					
6. Criterion Referenced Tests	X			One Set per Lab per	Project
(a) Structural Analysis-Level I (Grades 2 - 4)					
14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
(b) Structural Analysis - Level II (Grades 5 - 6)					
14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
(c) Structural Analysis - Level III (Grades 7 - 12)					
14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
7. Structural Analysis Progress Chart (1 chart - $ .65)		X		Two per Lab	Project
8. Phonic Analysis Progress Chart (1 chart - $ .90)		X		Two per Lab	Project
III. Materials Retrieval Manual (System having a Computer)					
A. Object programs and Instruction ($115.00)*			X**		Project
1. $100.00 per hour computer time 2. $ 15.00 per hour operator					

* Cost are based on a Univac #9300 tape operating system
** Data Processing personnel

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
B. Data tape (Rapides Parish materials retrieval manual) ($115.00)			X***	One per school district	Project
1. $100.00 per hour computer time 2. $ 15.00 per hour operator					
C. Two part carbon paper to print manuals on computer (12 manuals - $70.00)*			X	1,000 sheets per manual	Data Documents, Inc., Houston, Texas
D. Updating materials retrieval manual** (5,000 computer cards - $6.00)		X	X		Data Documents, Inc., Houston, Texas
V. Monitoring System		X			
A. Individual perscription forms (1 pad -50 sheets- $.48)		X	X	one per lab	
B. Two part carbon paper for computer printing (300 students - 12 classes - 12 teachers - $160.00)			X		Date Documents, Inc., Houston, Texas
C. Computer cards (5,000 - $10.00)			X		Data Documents, Inc., Houston, Texas

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* $5.00 per manual per lab

** Approximately 20% annual renewal based on 5 years

*** Data processing personnel

PART IV--Exportability (cont.)

10. Describe, on the chart below, any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figures for items listed should be included in the Resource Specification Section.

Option I

ESSENTIAL HARDWARE FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT HAVING A COMPUTER

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
Univac #9300 tape operating computer system or A computer system with adaptation compatibilities			X *	1	District

* Data Processing

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Option I

PERSONNEL REQUIRED FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT HAVING A COMPUTER

General Type Personnel	Number in Unit	Essential Special Qualifications	Time Involvement Per Unit
Coordinator	one per district	See attachment that follows	The "IRIS" reading system should become an integral part of the reading program of the system, schools, and classroom. Thus the time involved cannot be separated from the full time responsibilities of the personnel for the educational program.
Principal	one per school		
Teachers	one per 25 students		
Aides	one per four (4) teachers		
Data Processing			
(1) Programmer *	one per district		Time involved depends on adaptations necessary to adapt system's computer and amount of updating school district desires for materials retrieval manual.
(2) Key punch operator	one per district		
(3) Operator	one per district		

* Programmer will be needed if adaptations to another computer is necessary.

ATTACHMENT

Essential special qualifications

Coordinator - It is recommended that the teacher coordinator supervising the IRIS reading system in a school district be an experienced teacher, preferably with special training in reading. This person should be creative and innovative and truly concerned about the progress of each individual student in the district reading program.

The coordinator should train persons to tag materials, to update program material and be a liaison for data processing and the reading system.

Teachers - Teachers must be willing to become a manager of the reading program in the classroom and relinquish the roll of an authoritative figure with traditional ideas. Teachers should be aware of the use of computers in management techniques and the diagnostic and criterion referenced test techniques of instruction. Teachers should become very familiar with all components of the computer-managed reading system before implementation in the classroom.

Teachers can be trained in tagging materials for updating of computer components of the reading system.

Data Processing - Data processing personnel should be somewhat knowledgeable in educational technology and be competent in their respective field of computer science.

PART IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

Option I

PROCEDURES AND MATERIALS NECESSARY FOR PERSONNEL TRAINING FOR ADOPTING THE TOTAL IRIS READING MANAGEMENT SYSTEM WITH A SCHOOL DISTRICT HAVING A COMPUTER

Population Addresses Including Number	Skills to be taught	Organization of training, including length of time i.e. after school workshop etc.	Suggested sites*	Materials to be used	Follow-up Consultation
Administrators	See attachment that follows	One day	Consumer District	Materials prepared by the project and listed in response to questions #9 and #10, Part IV	One or two follow up consultations per district supplied by the demonstration staff.
Teachers					
Aides					
Data Processing					
(1) Programmer					
(2) Key punch operator					
(3) Operator					

ATTACHMENT

TRAINING PROGRAM FOR IRIS PROJECT

First Day - A. M.

Components of the In-service Program

- A. Behavioral and Performance Objectives
    - 1. Pretest
    - 2. Instruction and demonstration
    - 3. Posttest
- B. Individualizing Instruction
    - 1. Methods and techniques
    - 2. Materials use
    - 3. Systems approach
- C. The Role of Data Processing
    - 1. Computer program adaptations to school district computer
    - 2. Updating materials retrieval manual
    - 3. Monitoring report system
- D. Personnel Involvement
    - 1. Central office staff
    - 2. Principal
    - 3. Teacher, aides, and volunteers
    - 4. Data Processing personnel

First Day - P. M.

A. Demonstration of the IRIS Reading Lab

1. Diagnostic and criterion referenced testing
2. Prescription writing based on individual student needs
3. Structure and interpretation of monitoring forms
    - (a) Wall chart
    - (b) Prescription forms
    - (c) Computer summary reports

PART IV--Exportability (cont.)

8. Describe clearly and precisely the activities critical to the success of the project. These should be the project elements of your program which would have to be installed in another district for you to recognize the program as an adoption. If your project can also be adopted in part based on the separate objectives, cluster your responses by objective. Briefly discuss the pros and cons of partial adoption vs. full adoption of the program.

Description:

Option II

ESSENTIAL PROJECT ELEMENTS FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT RENTING OR CONTRACTING COMPUTER SERVICES

I. In-service

A. The first phase of the in-service program involves these basic areas:

(1) individualizing instruction
(2) behavioral objectives
(3) testing and evaluation
(4) classroom management techniques

B. The second phase of the in-service training includes a thorough understanding of each component of the IRIS reading management system including:

(1) diagnostic testing
(2) prescription writing and treatment
(3) criterion referenced testing
(4) utilization of all aspects of the monitoring system

Program personnel should be made aware of the various systemized techniques of the IRIS computer-managed reading system.

C. The third phase of the in-service training will involve data processing techniques to update and maintain the system. These include the following activities:

(1) Procedures for tagging materials to update the materials retrieval manual
(2) Familiarizing data processing personnel with the various aspects of the computer software package and/or any adaptations to existing hardware.

D. The following persons should be involved in the in-service training program:

(1) Member of the Board
(2) Superintendent of Schools or a representative
(3) School District Coordinator assigned to the program
(4) Principals
(5) Teachers, aides, and volunteers of the adopting system
(6) Data processing personnel

II. Testing

A. Diagnostic tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 10
(2) Structural Analysis - Grades 4 - 10

The diagnostic tests were constructed by the Title III personnel and staff as a pre and post assessment of needs and achievements. The tests were submitted to statistical analysis in order to determine an estimate of their effectiveness. Each test was developed with an acceptable performance for each student. This standard is essential for use of the test by the teacher to determine skills in which the student is deficient.

A manual of instructions is provided for each diagnostic test.

B. Criterion referenced tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12
(2) Structural Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12

Locally graded criterion referenced tests have been constructed by the Title III staff and personnel to evaluate the progress a student has made after treatment for specific reading deficiencies. Each test is printed and bound in pads of 25 copies. A teacher's copy is provided for each criterion test with instructions for administering the test, an answer key, and minimum acceptable levels established for success of performance.

Even though the diagnostic and criterion referenced tests were constructed for use with the IRIS reading management system, they have already been incorporated into the existing reading programs of several school districts in Louisiana.

III. Materials Retrieval Manual

The graded materials retrieval manuals were constructed with the use of a computer by researching numerous multi-media materials that provide treatment for specific skills in phonic and structural analysis. They provide the means for a teacher to quickly locate materials that will assist the student in overcoming his skills deficiencies. Each entry in the manual includes the following information:

(1) complete performance objectives for the skills of reading
(2) complete identification of numerous reading materials associated with each skill and exact location within the material
(3) rated levels of materials
(4) degree of involvement for teachers for each set of material
(5) sensory mode involved for instruction of material

Thus the teacher is free of much detail and will become an organized manager of the learning laboratory. The teacher refers to the retrieval manual kit and selects materials for each skill that are most appropriate to particular learner needs.

The existing Rapides Parish retrieval manuals can be replicated by another school district either by commercial printing or computer printing. They can be updated by deleting or adding other materials as a system's needs dictate. Prepared material tagging procedures and computer programs are available to systems desiring this service.

IV. Monitoring System

Monitoring forms provide the basis for a vital part of the computer-management reading system. Individual prescription forms, after use for classroom instruction, provide vital information about treatment of individual students. Information includes:

(1) actual reading level of student
(2) date of treatment
(3) performance objective and skills treated
(4) name of material and location
(5) evaluation of materials as successful or unsuccessful
(6) date criterion test is administered
(7) performance objective relating to the criterion test
(8) criterion test score and evaluation

The information from the individual prescription forms is keypunched and stored in the computer for printing of the following periodic monitoring summaries:

(1) individual student summaries showing objectives treated, materials used in treatment, and success of treatment
(2) class summaries showing objectives worked on by all students and the rate of success
(3) school summaries showing the rate of success of all classes in the school
(4) a system summary compiling data from schools
(5) a summary of all reading materials used in the system to treat reading objectives and an evaluation of each piece of material
(6) a criterion referenced test summary with an evaluation of each test by grades

Prepared computer programs on the [illegible] are available to those school districts wishing to use this phase of the program.

PART IV--Exportability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these terms of the previously determined critical program elements.

Option II

ESSENTIAL SOFTWARE FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT RENTING OR CONTRACTING COMPUTER SERVICES

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
In-Service					
A. Project Developed					
1. Preparation of Behavioral objectives (11 pages - $.25)		X		One per teacher	Project
2. Instructional Manual (IRIS Lab) (10 pages - $3.89)		X		One per teacher	Project
3. Phonic Analysis Test Manual (30 pages - $4.31)		X		One per teacher	Project
4. Structural Analysis Test Manual (30 pages - $4.31)		X		One per teacher	Project
5. "IRIS" Lab Level I for demonstration (all components -$104.31)		X		One per workshop group of 12	Project
6. "IRIS" Lab Level II for demonstration (all components - $104.31)		X		Oen per workshop group of 12	Project
7. "IRIS" Lab Level III for demonstration (all components - $104.31)		X		One per workshop group of 12	Project

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
B. Commercial Publishers					
"Programmed Word Attack for Teachers" (Workbook for Teachers) (68 pages-$2.95)		X		One per teacher	Charles E. Merrill Pub.
II. Testing					
A. Project Developed					
1. Phonic Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
2. Structural Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
3. Phonic Analysis - Diagnostic Test (16 pages - $.22)	X			One per student	Project
4. Structural Analysis - Diagnostic Test (12 pages - $.19)	X			One per student	Project
5. Criterion Referenced Tests	X			One set per Lab per level (25 students per Lab)	Project
(a) Phonic Analysis - Level I (Grades 2 - 4) 24 tests $11.12 score sheets 2.78 dividers 3.85 Total $17.75 per set					
(b) Phonic Analysis - Level II (Grades 5 - 6) 20 tests $11.06 score sheets 2.75 dividers 3.82 Total $17.63 per set					
(c) Phonic Analysis - Level III (Grades 7 - 12) 20 tests $11.06 score sheets 2.75 dividers 3.82 Total $17.63 per set					

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
6. Criterion Referenced Tests	X			One set per Lab per level (25 students per Lab)	Project
(a) Structural Analysis - Level I (Grades 2 - 4) 14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
(b) Structural Analysis - Level II (Grades 5 - 6) 14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
(c) Structural Analysis - Level III (Grades 7 - 12) 14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
7. Structural Analysis Progress Chart (1 chart - $.65)				Two per Lab	Project
8. Phonic Analysis Progress Chart (1 chart - $.90)		X		Two per Lab	Project
III. Materials Retrieval Manual (System renting a computer or contracting computer service)					
A. Object programs and Instruction ($115.00)* 1. $100.00 per hour computer time 2. $ 15.00 per hour operator			X**		Project

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* Cost are based on a Univac #9300 tape operating system
** Data Processing personnel

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
B. Data tape supplies (script materials retrieval manual) ($115.00)*			X***		Project
1. $100.00 per hour computer time 2. $ 15.00 per hour operator					
C. Updating					
1. $.10 per treatment entry**			X***		Project
(a) key punching (b) editing					
2. $.05 per treatment etc.**			X***		Project
(a) expansion (b) printing					
IV. Monitoring student (either renting a computer or contracting computer services)					
A. Individual prescription forms (1 pad =50 sheets= $.46)		X			Project
B. Computer services			X***		Project
1. $.20 per student initial set-up per year 2. $.30 per student maintenance					
V. Computer conversion cost to another machine					
A. $25.00 per hour programming****					
B. $15.00 per hour operator					

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* Cost are based on a Univac 9300 tape operating system

** Cost based on 28,000 treatments

*** Data processing personnel

**** Number of program hours will depend on compatibility of computer with that of Univac 9300

PART IV--Exportability (cont.)

10. Describe, on the chart below, any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figures for items listed should be included in the Resource Specification Section.

Option II

ESSENTIAL HARDWARE FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT RENTING OR CONTRACTING COMPUTER SERVICES

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
Univac #9300 tape operating computer system or A computer system with adaptation compatibilities **			X *	1	District

* Data Processing

** Conversion cost $40.00 per hour

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Option II

PERSONNEL REQUIRED FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT RENTING OR CONTRACTING COMPUTER SERVICES

General Type Personnel	Number in Unit	Essential Special Qualifications	Time Involvement Per Unit
Coordinator	one per district	See attachment that follows	The "IRIS" reading system should become an integral part of the reading program of the system, schools, and classroom. Thus the time involved cannot be separated from the full time responsibilities of the personnel for the educational program. — — — —
Principal	one per school		
Teachers	one per 25 students		
Aides	one per four (4) teachers		
Data Processing			
(1) Programmer *	one per district		Time involved depends on adaptations necessary to adapt system's computer and amount of updating school district desires for materials retrieval manual.
(2) Key punch operator	one per district		
(3) Operator	one per district		

* Programmer will be needed if adaptations to another computer is necessary.

186

ATTACHMENT

Essential special qualifications

Coordinator - It is recommended that the teacher coordinator supervising the IRIS reading system in a school district be an experienced teacher, preferably with special training in reading. This person should be creative and innovative and truly concerned about the progress of each individual student in the district reading program.

The coordinator should train persons to tag materials, to update program material and be a liaison for data processing and the reading system.

Teachers - Teachers must be willing to become a manager of the reading program in the classroom and relinquish the roll of an authoritative figure with traditional ideas. Teachers should be aware of the use of computers in management techniques and the diagnostic and criterion referenced test techniques of instruction. Teachers should become very familiar with all components of the computer-managed reading system before implementation in the classroom.

Teachers can be trained in tagging materials for updating of computer components of the reading system.

Data Processing - Data processing personnel should be somewhat knowledgeable in educational technology and be competent in their respective field of computer science.

PART IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

Option II

PROCEDURES AND MATERIALS NECESSARY FOR PERSONNEL TRAINING FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT RENTING OR CONTRACTING COMPUTER SERVICES

Population Addresses including Number	Skills to be taught	Organization of training, including length of time i.e. after school workshop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Administrators Teachers Aides	See attachment that follows	One day	Consumer District	Materials prepared by the project and listed in response to questions #9 and #10, Part IV	One or two follow up consultations per district supplied by the demonstration staff.
Data Processing (1) Programmer (2) Key punch operator (3) Operator					

ATTACHMENT

TRAINING PROGRAM FOR IRIS PROJECT

First Day - A. M.

Components of the In-service Program

A.. Behavioral and Performance Objectives

1. Pretest
2. Instruction and demonstration
3. Posttest

B. Individualizing Instruction

1. Methods and techniques
2. Materials use
3. Systems approach

C. The Role of Data Processing

1. Computer program adaptations to school district computer
2. Updating materials retrieval manual
3. Monitoring report system

D. Personnel Involvement.

1. Central office staff
2. Principal
3. Teacher, aides, and volunteers
4. Data Processing personnel

First Day - P. M.

A. Demonstration of the IRIS Reading Lab
    1. Diagnostic and criterion referenced testing
    2. Prescription writing based on individual student needs
    3. Structure and interpretation of monitoring forms
        (a) Wall chart
        (b) Prescription forms
        (c) Computer summary reports

PART IV--Exportability (cont.)

8. Describe clearly and precisely the activities critical to the success of the project. These should be the project elements of you program which would have to be installed in another district for you to recognize the program as an adoption. If your project can also be adopted in part based on the separate objectives, cluster your responses by objective. Briefly discuss the pros and cons of partial adoption vs. full adoption of the program.

Description:

Option III

ESSENTIAL PROJECT ELEMENTS FOR ADOPTING THE TOTAL IRIS READING MANAGEMENT SYSTEM WITH A SCHOOL DISTRICT NOT USING COMPUTER SERVICES

I. In-service

A. The first phase of the in-service program involves these basic areas:

(1) individualizing instruction
(2) behavioral objectives
(3) testing and evaluation
(4) classroom management techniques

B. The second phase of the in-service training includes a thorough understanding of each component of the IRIS reading management system including:

(1) diagnostic testing
(2) prescription writing and treatment
(3) criterion referenced testing
(4) utilization of all aspects of the monitoring system

Program personnel should be made aware of the various systemized techniques of the IRIS computer-managed reading system.

C. The third phase of in-service will involve management of the reading system with a locally developed monitoring system. The topics to be discussed are:

(1) Procedures for tagging and updating materials
(2) Data gathering forms for recording information about students, materials, evaluation and etc.
(3) Summary reports to be generated for management

D. The following persons should be involved in the in-service training program:

(1) Member of the Board
(2) Superintendent of Schools or a representative
(3) School District Coordinator assigned to the program
(4) Principals
(5) Teachers, aides, and volunteers of the adopting system
(6) Persons responsible for monitoring system

II. Testing

A. Diagnostic tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 10
(2) Structural Analysis - Grades 4 - 10

The diagnostic tests were constructed by the Title III personnel and staff as a pre and post assessment of needs and achievements. The tests were submitted to statistical analysis in order to determine an estimate of their effectiveness. Each test was developed with an acceptable performance for each student. This standard is essential for use of the test by the teacher to determine skills in which the student is deficient.

A manual of instructions is provided for each diagnostic test.

B. Criterion referenced tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12
(2) Structural Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12

Locally graded criterion referenced tests have been constructed by the Title III staff and personnel to evaluate the progress a student has made after treatment for specific reading deficiencies. Each test is printed and bound in pads of 25 copies. A teacher's copy is provided for each criterion test with instructions for administering the test, an answer key, and minimum acceptable levels established for success of performance.

Even though the diagnostic and criterion referenced tests were constructed for use with the [illegible] reading management system, they have already been incorporated into the existing reading programs of several school districts in Louisiana.

III. Materials Retrieval Manual

The graded materials retrieval manuals were constructed with the use of a computer by researching various multi-media materials that provide treatment for specific skills in phonic and structural analysis. They provide the means for the teacher to quickly locate materials that will assist the student in overcoming his skills deficiencies. Each entry in the manual includes the following information:

(1) complete performance objectives for the skills of reading
(2) complete identification of various reading materials associated with each skill and exact location within the material
(3) rated levels of materials
(4) degree of involvement for the student for each set of material
(5) sensory mode involved for each section of material

Thus the teacher is free of much detail and will become an organized manager of the learning laboratory. The teacher refers to the retrieval manual kit and selects materials for each skill that are most appropriate to particular learner needs.

The existing Rapides Parish retrieval manuals can be replicated by another school district either by commercial printing or computer printing. They can be updated by deleting or adding other materials as a system's needs dictate. Prepared material tagging procedures and computer programs are available to systems desiring this service.

IV. Monitoring System

Monitoring forms provide the basis for a vital part of the computer-management reading system. Individual prescription forms, after use for classroom instruction, record vital information about treatment of individual students. This information includes:

(1) actual reading level of student
(2) date of treatment
(3) performance objective and skill treated
(4) name of material and location
(5) evaluation of materials as successful or unsuccessful
(6) date criterion test is administered
(7) performance objective relating to the criterion test
(8) criterion test score and evaluation

The information from the individual prescription forms will be compiled on summary sheets and forwarded to a central collection point. Here the information will be further summarized into reports concerning individual student progress, class summary, school summary, etc., according to the needs and/or wishes of the adopting school districts.

PART IV--Exportability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these terms of the previously determined critical program elements.

Option III

ESSENTIAL SOFTWARE FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT NOT USING COMPUTER SERVICES

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
1. In-Service					
A. Project Developed					
1. Preparation of Behaviorial Objectives (11 pages - $.25)		X		One per teacher	Project
2. Instructional Manual ("IRIS" Lab) (10 pages - $3.89)		X		One per teacher	Project
3. Phonic Analysis Test Manual (30 pages - $4.31)		X		One per teacher	Project
4. Structural Analysis Test Manual (30 pages - $4.31)		X		One per teacher	Project
5. "IRIS" Lab Level I for demonstration (all components - $104.31)		X		One per workshop group of 12	Project

54A
(Op. III)

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
6. "IRIS" Lab Level II for demonstration (all components - $104.31)		X		One per workshop group of 12	Project
7. "IRIS" Lab Level III for demonstration (all components - $104.31)		X		One per workshop group of 12	Project
B. Commercial Publishers					
"Programmed Word Attack for Teachers" (Workbook for Teachers) (68 pages-$2.95)		X		One per teacher	Charles E. Merrill Pub. Co.
II. Testing					
A. Project Developed					
1. Phonic Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
2. Structural Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
3. Phonic Analysis - Diagnostic Test (16 pages $ .22)	X			One per student	Project
4. Structural Analysis - Diagnostic Test (12 pages - $ .19)	X			One per student	
5. Criterion Referenced Tests	X			One set per Lab per level (25 students per Lab)	Project
(a) Phonic Analysis - Level I (Grades 2 - 4)					
24 tests $11.12 score sheets 2.78 dividers 3.85 Total $17.75 per set					
(b) Phonic Analysis - Level II (Grades 5 - 6)					
20 tests $11.06 score sheets 2.75 dividers 3.82 $17.63 per set					

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
(c) Phonic Analysis - Level III (Grades 7 - 12) 20 tests $11.06 score sheets 2.75 dividers 3.82 Total $17.63 per set					
6. Criterion Referenced Tests	X			One set per Lab per level (25 students per Lab)	Project
(a) Structural Analysis - Level I (Grades 2 - 4) 14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
(b) Structural Analysis - Level II (Grades 5 - 6) 14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98					
(c) Structural Analysis - Level III (Grades 7 - 12) 14 tests $ 7.63 score sheets 1.85 dividers 2.48 Total $11.98 per set					
7. Structural Analysis Progress Chart (1 chart - $ .65)		X		Two per lab	Project
8. Phonic Analysis Progress Chart (1 chart - $ .90)		X		Two per lab	Project
III. Materials Retrieval Manual (System not using computer services)					
1. Phonic Materials Retrieval Manual		X		One per Lab 25 students per Lab	Project
(a) Level I (Grades K - 4) (380 pages - $39.00)					

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
(b) Level II (Grades 3 - 6) (250 pages - $26.36)					
(c) Level III (Grades 6 - 12) (125 pages - $13.00)					
2. Structural Analysis Materials Retrieval Manual		X		One per Lab 25 students per Lab	Project
(a) Level I (Grades K - 4) (176 pages - $18.50)					
(b) Level II (Grades 3 - 6) (189 pages - $20.82)					
(c) Level III (Grades 6 - 12) (77 pages - $8.75)					
IV. Monitoring System					
A. Individual Prescription forms (1 pad - 50 - sheets - $ .48)					
B. Construct forms necessary for a school district to print desired summary reports necessary to track student, materials, and etc. and manage the reading program.			X		To be developed if desired as part of the program
1. Summary form to collect student data on reading objectives.					
2. Summary forms to collect evaluation of materials use.					
3. Summary form to collect criterion referenced test results on individual students by grade level.					

PART IV--Exportability (cont.)

10. Describe, on the chart below, any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figure for items listed should be included in the Resource Specification Section.

Option III

ESSENTIAL HARDWARE FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT NOT USING COMPUTER SERVICES

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
(No hardware necessary)					

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Option III

PERSONNEL REQUIRED FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT NOT USING COMPUTER SERVICES

General Type Personnel	Number in Unit	Essential Special Qualifications	Time Involvement Per Unit
Coordinator	One per district	See attachment that follows	The "IRIS" reading system should become an integral part of the reading program of the system, schools, and classroom.
Principal	One per school		
Teachers	One per 25 students		
Aides	One per four (4) teachers		Thus the time involved cannot be separated from the full time responsibilities of the personnel for the educational program. - - - - -
Clerks (clerical)	One per 400 students		This would depend on the schedule of reporting and method of compilation.

ATTACHMENT

Essential special qualifications

Coordinator - It is recommended that the teacher coordinator supervising the IRIS reading system in a school district be an experienced teacher, preferably with special training in reading. This person should be creative and innovative and truly concerned about the progress of each individual student in the district reading program.

The coordinator should train persons to periodically tag materials and be responsible for updating program materials. Monitoring the reading management system through a school district designed reporting system will also be a major responsibility of this person. Methods of compiling information from individual prescription forms and summarizing the information in various summary reports on individual student progress, materials evaluation, etc., must be maintained from a central point.

Teachers - Teachers must be willing to become managers of the reading program in the classroom and relinquish the roll of an authoritative figure with traditional ideas. Teachers should be aware of the use of management techniques and the diagnostic and criterion referenced test techniques of instruction. Teachers should become very familiar with all components of the computer-managed reading system before implementation in the classroom.

Teachers can be used in tagging materials for udating the components of the reading system.

Clerical - Clerical aides must be able to tabulate and compile data on prepared forms.

PART IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

Option III

PROCEDURES AND MATERIALS NECESSARY FOR PERSONNEL TRAINING FOR ADOPTING
THE TOTAL IRIS READING MANAGEMENT SYSTEM
WITH A SCHOOL DISTRICT NOT USING COMPUTER SERVICES

Population Addresses including Number	Skills to be taught	Organization of training, including length of time i.e. after school workshop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Administrators	See attachment that follows	One day	Consumer District	Materials prepared by the project and listed in response to questions #9 and #10, Part IV	One or two follow up consultations per district supplied by the demonstration staff.
Teachers					
Aides					

ATTACHMENT

TRAINING PROGRAM FOR IRIS PROJECT

First Day - A. M.

Components of the In-service Program

- A. Behavioral and Performance Objectives
    - 1. Pretest
    - 2. Instruction and demonstration
    - 3. Posttest
- B. Individualizing Instruction
    - 1. Methods and techniques
    - 2. Materials use
    - 3. Systems approach
- C. Monitoring Systems
    - 1. Updating materials retrieval manual
    - 2. Summary reports for evaluation
- D. Personnel Involvement
    - 1. Central office staff
    - 2. Principal
    - 3. Teacher, aides, and volunteers

First Day - P. M.

- A. Demonstration of the IRIS Reading Lab
    - 1. Diagnostic and criterion referenced testing
    - 2. Prescription writing based on individual student needs.

3. Structure and Interpretation of Monitoring Forms

   (a) Wall chart

   (b) Prescription forms

   (c) Summary reports

Part IV--Exportability (cont.)

8. Describe clearly and precisely the activities critical to the success of the project. These should be the project elements of you program which would have to be installed in another district for you to recognize the program as an adoption. If your project can also be adopted in part based on the separate objectives, cluster your responses by objective. Briefly discuss the pros and cons of partial adoption vs. full adoption of the program.

Description:

Option IV

ESSENTIAL PROJECT ELEMENTS FOR A SCHOOL DISTRICT ADOPTING ONLY THE TESTING PROGRAM OF THE IRIS READING MANAGEMENT SYSTEM

I. In-service

A. The first phase of the in-service program involves these basic areas:

(1) individualizing instruction
(2) behavioral objectives
(3) testing and evaluation
(4) classroom management techniques

B. The second phase of the in-service training includes a thorough understanding of each component of the IRIS reading management system including:

(1) diagnostic testing
(2) prescription writing and treatment
(3) criterion referenced testing
(4) Wall Charts

Program personnel should be made aware of the various systemized techniques of the IRIS computer-managed reading system.

C. The following persons should be involved in the in-service training program:

(1) Member of the Board
(2) Superintendent of Schools or a representative
(3) School District Coordinator assigned to the program
(4) Principals
(5) Teachers, aides, and volunteers of the adopting system

II. Testing

A. Diagnostic tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 10
(2) Structural Analysis - Grades 4 - 10

The diagnostic tests were constructed by the Title III personnel and staff as a pre and post assessment of needs and achievements. The tests were submitted to statistical analysis in order to determine an estimate of their effectiveness. Each test was developed with an acceptable performance for each student. This standard is essential for use of the test by the teacher to determine skills in which the student is deficient.

A manual of instructions is provided for each diagnostic test.

B. Criterion referenced tests

(1) Phonic Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12
(2) Structural Analysis - Level I - Grades 2 - 4
Level II - Grades 5 - 6
Level III - Grades 7 - 12

Locally graded criterion referenced tests have been constructed by the Title III staff and personnel to evaluate the progress a student has made after treatment for specific reading deficiencies. Each test is printed and bound in pads of 25 copies. A teacher's copy is provided for each criterion test with instructions for administering the test, an answer key, and minimum acceptable levels established for success of performance.

Even though the diagnostic and criterion referenced tests were constructed for use with the IRIS reading management system, they have already been incorporated into the existing reading programs of several school districts in Louisiana.

PART IV--Exportability (cont.)

9. List essential materials, on the chart below, (software) used by students, teachers, and others and the source. Cost figures for items listed should be included in the Resource Specifications Section. List the source of the materials. Review these terms of the previously determined critical program elements.

Option IV

ESSENTIAL SOFTWARE FOR A SCHOOL DISTRICT ADOPTING
ONLY THE TESTING PROGRAM OF THE IRIS READING MANAGEMENT SYSTEM

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
I. In-Service					
A. Project Developed					
1. Preparation of Behavioral Objective (11 pages - $ .25)		X		One per teacher	Project
2. Instructional Manual ("IRIS" Lab) (10 pages - $3.89)		X		One per teacher	Project
3. Phonic Analysis Test Manual (30 pages- $4.31)		X		One per teacher	Project
4. Structural Analysis Test Manual (30 pages - $4.31)		X		One per teacher	Project
B. Commercial Publishers					
"Programmed Word Attack for Teachers" (Workbook for Teachers) (68 pages - $2.95)		X		One per teacher	Charles E. Merrill Pub Co.

54A
(Op. IV)

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
II. Testing					
A. Project Developed					
1. Phonic Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
2. Structural Analysis - Manual of Instruction (30 pages - $4.81)		X		One per teacher	Project
3. Phonic Analysis - Diagnostic Test (16 pages - $ .22)	X			One per student	Project
4. Structural Analysis - Diagnostic Test (12 pages - $ .19)	X			One per student	Project
5. Criterion Referenced Tests	X			One set per Lab per level (25 students per Lab)	Project
(a) Phonic Analysis - Level-I (Grades 2 - 4) 24 tests $11.06 score sheets 2.78 dividers 3.85 total $17.75 per set					
(b) Phonic Analysis - Level - II (Grades 5 - 6) 20 tests $11.06 score sheets 2.75 dividers 3.82 Total $17.63 per set					
(c) Phonic Analysis - Level - III (Grades 7 - 12) 20 tests $11.06 score sheets 2.75 dividers 3.82 Total $17.63 per set					

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
6. Criterion Referenced Tests	X			One set per Lab per level (25 students per Lab)	Project
(a) Structural Analysis - Level I (Grades 2 - 4)					
14 tests $ 7.63					
score sheets 1.85					
dividers 2.48					
Total $11.98 per set					
(b) Structural Analysis - Level II (Grades 5 - 6)					
14 tests $ 7.63					
score sheets 1.85					
dividers 2.48					
$11.98 per set					
(c) Structural Analysis - Level III (Grades 7 - 12)					
14 tests $ 7.63					
score sheets 1.85					
dividers 2.48					
$11.98					
7. Structural Analysis Progress Chart (1 chart - $ .65)		X		Two per Lab	Project
8. Phonic Analysis Progress Chart (1 chart - $ .90)		X		Two per Lab	Project

PART IV--Exportability (cont.)

10. Describe, on the chart below, any essential equipment (hardware) and/or unique facilities required for the project for adoption and its use by activities. Cost figure for items listed should be included in the Resource Specification Section.

Option IV

ESSENTIAL HARDWARE FOR A SCHOOL DISTRICT ADOPTING
ONLY THE TESTING PROGRAM OF THE IRIS READING MANAGEMENT SYSTEM

Type of Materials	User			Quantity Per Unit	Source
	Student	Teacher	Others		
(No hardware necessary)					

210

PART IV--Exportability (cont.)

11. Describe, on the chart below, the types, numbers and qualifications of personnel required to operate the project successfully. View this in terms of what another district will need to adopt your program.

Option IV

PERSONNEL REQUIRED FOR A SCHOOL DISTRICT ADOPTING
ONLY THE TESTING PROGRAM OF THE IRIS READING MANAGEMENT SYSTEM

General Type Personnel	Number in Unit	Essential Special Qualifications	Time Involvement Per Unit
Coordinator	One per district	See attachment that follows	The "IRIS" reading system should become an integral part of the reading program of the system, schools, and classroom. Thus the time involved cannot be separated from the full time responsibilities of the personnel for the educational program.
Principal	One per school		
Teachers	One per 25 students		

ATTACHMENT

Essential special qualifications

Coordinator - It is recommended that the teacher coordinator supervising the testing program of the IRIS reading system in a school district be an experienced teacher, preferably with special training in reading. This person should be creative and innovative and truly concerned about the progress of each individual student in the district reading program.

Teachers - Teachers need only to be knowledgeable about the diagnostic and criterion referenced test techniques of reading instruction and various methods of utilizing testing information to have a more effective reading program.

PART IV--Exportability (cont.)

12. Describe, on the chart below, procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

Option IV

PROCEDURES AND MATERIALS NECESSARY FOR PERSONNEL TRAINING FOR ADOPTING ONLY THE TESTING PROGRAM OF THE IRIS READING MANAGEMENT SYSTEM

Population Addresses including Number	Skills to be taught	Organization of training, including length of time i.e. after school workshop etc.	Suggested sites	Materials to be used	Follow-up Consultation
Administrators	See attachment that follows	One day	Consumer District	Materials prepared by the project and listed in response to questions, #9 and #10, Part IV	One or two follow up consultations per district supplied by the demonstration staff.
Teachers					
Aides					

ATTACHMENT

TRAINING PROGRAM FOR IRIS PROJECT

First Day - A. M.

Components of the In-service Program

- A. Behavioral and Performance Objectives
    - 1. Pretest
    - 2. Instruction and demonstration
    - 3. Posttest
- B. Individualizing Instruction
    - 1. Methods and techniques
    - 2. Materials use
- C. Demonstration of Use of IRIS Testing
    - 1. Diagnostic test
    - 2. Criterion referenced tests
    - 3. Wall charts

PART IV--EXPORTABILITY (cont.)

13. Identify special problems (unique to this kind of project) which the adopting district might encounter in implementing the project and describe solutions. Exclude problems which will not have a bearing on the exportability of the project.

List problems and solutions:

The most important aspect of the successful use of the IRIS Computer-Managed Reading System is the manner and degree to which it is introduced into the school system.

1. Problem: Misunderstanding of the concepts of computer-managed instruction, individualizing of instruction, and systems approaches to instruction.

   Solution: A thorough in-service program for adopting staff personnel centering around the understanding of these concepts will enhance the success of the project initially.

2. Problem: Adoption of the IRIS project as a total system or in parts.

   Solution: Systems who have access to a computer, computer rental, or contract services can easily and economically adopt the entire reading system.

3. Problem: Lack of compatibility of computer systems.

   Solution: Adopting school district can either:

   (1) Lease computer services from computer service with compatible hardware

   (2) Purchase or rental of hardware with compatible hardware

   (3) Hiring of programmer and purchasing programs to facilitate transition of district computers.

4. Problem: Adoption of school district without the use of computers and with limited printing facilities.

Solution: Establish another printing format so that revisions and updating can be made economically. Develop new reporting material to facilitate monitoring system for those districts not using computer services. Those systems not wishing to use the services of a computer can adopt the entire reading system with the assistance of additional office clerical assistance.

APPENDIX

RESUME

NAME: Otis Cox

HOME ADDRESS: Route 1, Box 46
Natchitoches, Louisiana 71457

BIRTHDATE: August 16, 1932

EDUCATION:

Ph.D. - University of Alabama, Tuscaloosa, Alabama, August, 1969, Educational Psychology

M.Ed. - Northwestern State University, Natchitoches, Louisiana, August, 1963, Counseling

B.A. - Furman University, Greenville, South Carolina, May, 1955, English

EXPERIENCE:

1975 - Acting Director, Bureau of Research, Northwestern State University

1969 - Present, Northwestern State University, Natchitoches, Louisiana. Taught elementary statistics, analysis of variance, correlation, research design, theories of learning, foundations of educational psychology, tests and measurements, adolescent psychology.

Since 1970, Director of Educational Research, College of Education. Responsible for supervision of dissertations and theses. Assists all departments in securing federal grants.

Since 1971, Chairman, Division of Educational Psychology within Department of Behavioral Science.

Served as consultant to the following institutions during this time period:

Louisiana State Department of Education, Baton Rouge, Louisiana. Prepared assessment of needs models, ESEA Title I and Title III.

Rapides Parish Schools, Alexandria, Louisiana. Consultant and evaluator of ESEA Title I and Title III, one of the tasks being the establishment of a computer-managed individualized reading program. Assisted in evaluation of both programs.

DeSoto Parish Schools, Mansfield, Louisiana. Evaluator of ESEA Title I.

Ouachita Parish Schools, Monroe, Louisiana. Consultant and evaluator, ESEA Title I and Title III.

McNeese State University, Lake Charles, Louisiana. Assisted in evaluation of EPDA Program in media education.

Avoyelles Parish Schools, Marksville, Louisiana. Evaluator for ESEA Title III Career Education Program.

Winn Parish Schools, Winnfield, Louisiana, Evaluator, ESEA Title III.

1968-1969 -- University of Alabama, Graduate Assistant, Department of Educational Psychology. Taught graduate elementary statistics and educational psychology. Assisted masters and doctoral students with statistical methods, research design, and computer programming.

1963-1968 -- Ouachita Parish School Board, Monroe, Louisiana, Counselor.

1958-1963 -- Rapides Parish School Board, Alexandria, Louisiana, English, Counselor.

1955-1958 -- United States Army, School Staff, Fort Devens, Massachusetts.

PUBLICATIONS:

Model program for Assessment of Education Needs, ESEA Title I, Louisiana State Department of Education, 1970.

Louisiana State Plan, ESEA Title III, Louisiana State Department of Education, 1972

Wrote Objectives, test items, and management system for motivational kit for Educational Achievement Corporation, Waco, Texas.

RESUME

NAME: Dr. Mildred Hart Bailey

Dr. Mildred Hart Bailey, Professor of Education at Northwestern State University, Natchitoches, Louisiana, is a native of Louisiana. She received the B.S. and M.A. degrees from Northwestern State University, the Doctor of Education Degree from the University of Mississippi ("Ole Miss") at Oxford, and has completed post-doctoral study at the Reading and Language Arts Center, Syracuse University, Syracuse, New York. While studying at Syracuse University, Dr. Bailey's work was directed by Dr. William D. Sheldon, well-known reading authority and author of the Sheldon Basic Reading Series.

Background of experience includes teaching at the elementary level as both a classroom teacher and a supervising teacher, college teaching at both Northwestern State University and the University of Mississippi. In the summer of 1966, Dr. Bailey served as visiting professor in reading at Syracuse University. She frequently serves as consultant for school systems in Louisiana and adjoining states. Often a conference speaker, she was the featured speaker at the Louisiana State University Reading Conference in 1967 and the University of Southern Mississippi Reading Conference in May, 1974.

Under Dr. Bailey's direction, Northwestern State University developed the first graduate degrees in reading in the State of Louisiana and, in 1967, Northwestern awarded the first graduate degree in reading to be granted in this State. Dr. Bailey presently serves as Director of the Reading Center at Northwestern State University.

Her doctoral dissertation was entitled "The Utility of Selected Phonic Generalizations for Children in Grades One Through Six". A report of that study was published in the February, 1967, issue of the *Reading Teacher* and was selected by the University of Chicago in the spring of 1968 for inclusion in the William S. Gray Memorial Collection of Scientific Studies in Reading. Listing and annotation of the study was also published in the *Reading Research Quarterly*, Winter, 1968.

Other publications include chapters in *Reading and Realism*, published by the International Reading Association in 1969; *Teaching Word Recognition Skills*, published by the International Reading Association in 1971; and *Individualizing Reading Instruction*, edited by Larry A. Harris and Carl B. Smith and published by Holt, Rinehart and Winston, Inc., in 1972. Her most recent publication (January, 1974) is *Creative Writing Experiences*, published by Steck-Vaughn Company. Dr. Bailey has also served as educational consultant for *Choice*, a monthly book selection journal published by the American Library Association, which has published several of her book reviews related to the teaching of reading and the language arts. She presently is educational consultant for the Imaginary Line Handwriting program for Steck-Vaughn Company.

In April, 1968, Dr. Bailey participated in the International Reading Association's annual meeting in Boston, Massachusetts, as chairman of a panel discussion on fourth-grade reading, and she also read a research paper which she had written entitled "Utility of Vowel Digraph Generalizations". During the 1969 International Reading Association Annual Convention in Kansas City, Missouri, she chaired a session on "Reading in the Content Area", and during the 1970 International Reading Association Annual Convention in Anaheim, California, she served as chairman of the session on "Reading and the Disadvantaged Child". Dr. Bailey read a paper on "Individualizing Reading Instruction" at the 1974 International Reading Association Annual Convention in New Orleans.

In December, 1969, Northwestern State University's Reading Center was named as one of thirty ERIC/CRIER Reading Resource Centers in the nation by the U. S. Office of Education. Dr. Bailey serves as Director of that Center. She also investigated and wrote the elementary reading and language arts section of the Survey of Educational Needs in Louisiana for the State Department of Education in 1970. In the fall of 1973, she served on the Basal Reading Textbook Adoption Committee for the State Department of Education in Louisiana.

Dr. Bailey, who is listed in Who's Who Among Authors and Journalists, Who's Who of American Women, the Dictionary of International Biography, and the Campendium: Persons of Eminence in Exceptional Education, holds memberships in Phi Kappa Phi, International Reading Association, College Reading Association, Louisiana State Reading Council, Northwestern Reading Council, National Council of Teachers of English, Louisiana Teachers Association, and Kappa Delta Pi. Language arts in the elementary grades and teacher education in the area of the language arts are areas of special interest to her.

STATE REVIEW AND RATING FORM

Directions: Review the Application for Validation

Rate each item contained in the Application under the three parts (Effectiveness/Success, Resource Specifications, and Exportability) by indicating on the Summary Rating forms whether the information furnished by the local educational agency is acceptable or unacceptable.

The criteria for acceptability of information include, the completeness, the quality, and the appropriateness of the applicant's response to each question. The reviewer should keep two questions constantly before him: (1) Has the project successfully met the criteria for effectiveness/success, resource specifications, and exportability as defined in both the Application for Validation and On-Site Validation form? (2) Has the project provided verifiable evidence to support its claims?

State Review
and Rating Form

Review and Rating of Evidence of Effectiveness/Success

Directions: Review the evidence provided for each item under Part II, Effectiveness/Success, in the Application for Validation.

Rate as "acceptable" (A) or "unacceptable" (U) the information furnished by the local educational agency on each item.

Items 1, 5, 6, and 7 for each objective must receive a rating of "acceptable" (A) or the objective must be eliminated from further consideration or nomination for validation. If the objective is eliminated, the State review team should determine if the objective is crucial to the significance of the project or practice under consideration for validation. Upon such determination, the entire project or practice should be rejected from further review.

Review and Rating of Evidence of Effectiveness/Success (cont.)

SUMMARY RATING

Rating
A=Acceptable
U=Unacceptable

	Evidence of Effectiveness/Success Items	Nominated Objective by Number						
		1	2	3	4	5	6	7
*1.	Measurability of objective.........	A	A	A	A			
2.	Needs determination................	A	A	A	A			
3.	Intervention process...............	A	A	A	A			
4(a).	Evaluation design..................	A	A	A	A			
4(b).	Data Collection....................	A	A	A	A			
4(c).	Sampling technique.................	A	A	N/A	N/A			
4(d).	Evidence of effectiveness..........	A	A	A	A			
4(e).	Control group selection............	A	A	N/A	N/A			
4(f).	Evaluation Instruments.............	A	A	A	A			
4(g).	Qualified personnel................	A	A	A	A			
4(h).	Data accuracy......................	A	A	A	A			
4(i).	Data analysis procedures...........	A	A	A	A			
*5.	Statistical evidence of attainment of objective...........	A	A	A	A			
*6.	Educational significance of attainment of objective...........	A	A	A	A			
*7.	Learner change and generalizability	A	A	A	A			

*Items 1, 5, 6, and 7 for each objective must receive a rating of "acceptable" (A) or the objective must be eliminated from further consideration or nomination for validation. If the objective is eliminated, the state review team should determine if the objective is crucial to the significance of the project or practice under consideration for validation. Upon such determination, the entire project or practice should be rejected from further review.

State Review
and Rating Form

Review of Resource Specifications

Directions: Review the evidence provided for each item under Part III, Resource Specifications in the Application for Validation.

Each item must receive a check "YES" or the project or practice must be rejected from further review. Verify that the back-up information on all items is available and reliable.

SUMMARY

Check "YES" or "NO" for completeness of the information furnished by the local educational agency on each item.

	YES	NO
1. Information on start-up costs for replication	☒	☐
2. Information on operational costs for replication	☒	☐
3. Information on management costs for replication	☒	☐
4. Information on per learner start-up costs	☒	☐
5. Information on per learner operational costs	☒	☐
6. Information on per learner management costs	☒	☐

Review and Rating of Evidence of Exportability

Directions: Review the evidence provided for each item under Part III, Exportability, in the Application for Validation.

Rate as (A) "acceptable: or (U) "unacceptable" the information furnished by the local educational agency on each item.

Asterisked items 1, 2, 3, 8, 14 and 15 must receive a rating of "acceptable" (A) or the project or practice must be rejected from further review.

SUMMARY RATING

Evidence of Exportability Items

*1.	Description of Learner Needs	A
*2.	Continuation of Learner Elements with State or Local funds	A
*3.	Willingness to serve as a demonstration Site if funded for dissemination	A
4.	Description of Target Population	A
5.	Description of Learner Involvement	A
6.	Description of Institutional Variables	A
7.	Description of Community and Home Variables	A
*8.	Description of Activities Critical to Success of the Project	A
9.	Availability of Essential Materials (Software)	A
10.	Description of (Essential) Equipment (Hardware) or Unique Facilities	A
11.	Qualifications of Personnel	A
12.	Materials and Procedures for Training	A
13.	Description of Problems and Solutions	A
*14.	Effectiveness/Success review	A
*15.	Exportability review	A

State Review
and Rating Form

State Education Agency Selection Form

Name of Project: Individual Reading Instruction for Students
School District: Rapides Parish School Board
Address: P. O. Box 1230
Alexandria, Louisiana 71301

Upon the review of Application for Validation:

X This project is selected for validation.

This project is not selected for validation.

Signature of Appropriate SEA Official

Dr. Joseph C. Kite
Print name

Assistant Superintendent
Title

May 15, 1975
Date

ON-SITE VALIDATION FORM

Directions: This form is used by the validation team to record its on-site findings and ratings of evidence. The evidence to be validated on-site is found in the local project's Application for Validation and its attachments of reports and other documents.

The form has four parts:

Part I:	Validation of Information and Project Description
Part II:	Validation of Evidence on Effectiveness/Success
Part III:	Validation of Evidence on Resource Specifications
Part IV:	Validation of Evidence on Exportability

Please read the directions carefully. Note in Part II, Validation of Evidence on Effectiveness/Success, validation of evidence and the reporting of the findings are to be done by objective.

Validation is based on evidence presented, although additional evidence obtained during the validation visit may be recorded and validated.

The validation report for each item should contain the following information: (1) what you validated; (2) how you validated; (3) what you found.

Rate the evidence according to the instruction sheets preceding each Part.

The project abstract should be validated carefully and completed after Parts II through IV have been validated. It will become the major source of information about the project or practice.

Submit four copies of the validation report, including all supporting documents, to the State educational agency within 10 days after on-site validation.

PART I--Validation of Information and Project Description (Complete Part I after Completing Parts II through IV)*

Directions: Verify and correct the Application for Validation, Part I. Sections A and B, (Information and Project Description, Pages 22-23). This part does not require ratings. After verification and corrections, Sections A and B become part of the Validation Report. The team validation report format is found on pages 106-115.

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* Parts II through IV serve as the source of information for Part I.

PART II--Validation of Evidence on Effectiveness/Success

DIRECTIONS FOR RATING

On-site validation of effectiveness/success is based on the evidence reported in Application for Validation, Part II Effectiveness/Success and the accompanying support documents on pages 24 - 39.

Validation of evidence and the reporting of findings is to be done by objectives and should parallel the evidence presented in the Application for Validation. The 15-item Validation of Effectiveness/Success corresponds to the 15-item Application for Validation. Since validation is done by objective, you will need as many sets of Part II blank validation forms as there are objectives to be validated. The handbook contains one set of forms. Reproduce as many sets as you need.

Rating by Validation Item

1. Examine and verify the evidence provided for each item under each objective by the project personnel. Validate each objective separately.

2. Circle the appropriate number. Assign a point value of "0" to any item for which no observable evidence is presented.

   Assign a point value of "1" to any item for which the project staff presents observable evidence that is persuasive in support of the item intent.

   Assign a point value of "2" for any item for which the project staff presents observable evidence of a substantial and persuasive, but not conclusive, nature for the item.

   Assign a point value of "3" for any item for which the project staff presents observable evidence which is both so conclusive and compelling that the intent of the item is wholly fulfilled.

3. Record the rating value for each item on the Validation Summary Record (at the end of this section) in the appropriate item/objective cell (page 83).

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Project objective(s) identified for validation have been attained and the performance of the learners has been improved.

Objective No. 1

1. Review the structure of the objectives presented in application for Validation, Part II. Determine if the objective contains the necessary specifications to render it measurable at a given point in time. The specifications must include: (1) who is able to do what, (2) at what level of performance, and (3) under what conditions. Any objective not meeting the necessary specifications of measurability must be eliminated from further investigation and validation. Include an explanation of the deficiencies. If the objective to be eliminated is crucial to the significance of the project or the practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

Students in grades 3, 4, 7, and 9 who participate in the IRIS program will score significantly higher (.05 level) in selected reading skills and competencies than will non-participants when measured by the following locally constructed tests:

Diagnostic Test, Phonic Analysis, Level I
Diagnostic Test, Phonic Analysis, Level II
Diagnostic Test, Structural Analysis

The objective includes the following specified elements:

1. Who is the demonstrator of the behavior
2. The behavior to be demonstrated
3. The context of the behavior
4. The desired level of performance
5. The method of measurement

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

2. Examine and verify the needs assessment procedures and findings for the nominated objective and determine the adequacy of the evidence of need to justify the selection of the objective.

Validation of Evidence:

An assessment of perceived needs conducted in the Spring of 1972 revealed the greatest educational need of students in the Rapides Parish School System to be in the area of reading. In assessing the needs of the system a rating scale was distributed to:

(1) Rapides Parish Public and Parochial School Board members

(2) ESEA Advisory Committee members

(3) Rapides Parish School Board administrative supervisory staff members

(4) Public and parochial school principals

(5) Drop-outs enrolled in a work incentive class at the Rapides Parish Skill Center

Included in the assessment were random sampling of the opinions of teachers in public and parochial schools, seniors in public and parochial schools, and parents whose children attend public and parochial schools.

Also included in the assessment of needs was a summary of attendance data showing increased absences from the lower to upper grades.

Eighteen activities were included on the assessment form. The final ranking of activities showed reading to be the top priority with a 5.385 rating. This priority rating demonstrated that those surveyed felt reading to be the number one need for improvement in the Parish school system. S.R.A. and I.T.E.D. achievement tests administered in the Rapides Parish School System in 1971-72 further revealed that 30% of all students in Rapides Parish grades 2 - 6 in Title I and non-Title I schools scored below the 25th percentile in reading achievement. The same survey also revealed that 26% of those students in grades 7 - 11 ranked below the 25th percentile in reading achievement.

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

3. Examine and verify the intervention process for this objective including where appropriate the following elements: grade levels, number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental-community involvement, preservice/inservice training, etc.

Validation of Evidence:

Individualized Reading Instruction for Students is a computer-managed reading project based on diagnosis - prescription - treatment - post criterion referenced testing. The project was funded for a three year period beginning July 1, 1972 to June 30, 1975. Approximately 1,000 students have been involved in the developmental phase of the project for the past three years. Approximately 339 students are involved in the third year experimental phase with 196 in experimental groups and 143 in control groups. Even though the project was developed with students in grades 2 - 10, for the third year of experimental study grades 3, 4, 7, and 9 were selected.

The project focus during the two years of development and field testing and the last year of implementation under the experimental design has been on students who were identified on the basis of teacher judgement, student's grades, standardized test scores, and counselor recommendations relative to reading competencies. These students are identified for specific skill deficiencies in Phonic and Structural Analysis with locally constructed, graded diagnostic tests. A period of treatment follows diagnosis. Educational prescriptions pertaining to known and identified reading problems of individual students are written. A computer-based materials retrieval manual is used by teachers to develop these prescriptions. Evaluation after treatment of specific skill deficiencies is used for the purpose of determining whether skills deficiencies have been corrected. Criterion referenced tests have been constructed in each skill area on three levels to make this evaluation after treatment. Monitoring forms provide a valuable service in the reading management system by tracking skills growth of individual students or groups, for instructional planning and for transmitting information to data processing. Periodic computer print-outs are provided to individual teachers, school and system supervisory personnel in order to provide information on the various aspects of the reading program. In-service programs were initiated for Title III staff, teachers, aides, and principals to lend guidance in exposing them to new and innovative methods of instruction as evidenced by in-service summary reports, agendas, and completed registration forms. Workshops designed to acquaint teachers with components of the reading system were held prior to the introduction and implementation of each part of the reading lab.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(a). Each objective must have an evaluation design which will provide the information necessary to determine if the learner change occurred at the levels specified in the objective.

Review the evaluation design for each objective for the purpose of determining that implementation of the design yielded information for rendering conclusions about the attainment of the objective. (In the absence of such a design, the validator should eliminate the objective from further investigation and discuss the discrepancies encountered in the evaluation design). If the objective to be eliminated is crucial to the significance of the project or practice under validation, a meeting of the entire Validation Team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The evaluation plan for this objective consists of an experimental control group design. Students that were participating in the project experimentally were of two groups, those who were continuing from their second year who had been involved early as part of the field testing group, and those who were beginning the program for the first time. In much of the analysis the two experimental groups were treated separately. Data presented as an evaluation of these groups were included together as one experimental group. The analysis of covariance technique was selected for statistical analysis of the data gathered. The design is a pretest-posttest design with the pretest used as the covariate in the analysis of covariance. Thus the pretest served as baseline data in determining the level at which all persons began the project year.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(b). Review the procedures for data collection for each objective. The description of the procedures should include types of data collected, the persons responsible, timelines, methods of data collection, etc.

Validation of Evidence:

The times for testing and data collection were set prior to the school year and have been maintained and deadlines have been met throughout as evidenced by the pre-post diagnostic test schedule. Tests were given prior to the beginning of the instructional activities and administered by trained teachers. The data were scored and forwarded to the staff office where it was recorded and summarized for later analysis. The posttest was administered in all schools at the times indicated on the attached test schedules, and the tests were scored and the results summarized and submitted to the computer center for analysis.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(c). Review the sampling technique used for each objective. Verify the reported sample size, selection techniques and evidence of representativeness.

If sampling was not used, write NA (not applicable) in the space marked 4(c) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

Experimental group students were selected by test scores. A sample for the control group was selected for all non-participating students that were comparable throughout the parish. The procedures for selecting control groups is described in Part II, 4(e), Objective 1. The subjects in the experimental group were not sampled; thus testing involved all of those who participated in the program. This section is not applicable other than to the extent that the control group represented a sample of the remainder of the school population.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(d). Review the evidence that supports the project's claim that the program intervention was the cause of the attainment of the objective(s).

Validation of Evidence:

Throughout the project efforts were made to continually monitor the activities within the control and experimental groups to assure that the results would have validity in terms of the treatment administered. The experimental groups received experiences through application of reading kits, whereas the control group did not. Pretesting and posttesting assured that analysis would be made in terms of amount gained by each person regardless of where he started. Since there were no unusual occurrences during testing to affect the results and since there were no unusual occurences in the instructional program in either the control or experimental groups, the project staff feels that the changes that occurred in the students were a result of the program involved. In addition, the basic research design and testing procedures have assured the staff that the changes occurred as a result of the program. For example, the number of students involved in the experimental and control groups were so large that it eliminated the chance that the student groups may be extremely different due to chance differences of a few individuals.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(e). Review the procedures used to select control groups. Verify that the procedures used do not violate the underlying assumptions of a "control group."

Where procedures are "not applicable", write NA in the space marked 4(e) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

Using a pretest - posttest control group design for the third year of the project, 196 students in grades 3, 4, 7, and 9 of the project schools were matched with 143 students from 6 control schools to participate in the project.

The distribution of the target population is as follows:

	Experimental Group		Control Group
Grade Level	Students treated in project for 1 year	for 2 years	No treatments
3	31	0	34
4	18	18	26
7	36	10	49
9	70	13	34
Sub-Total	155	41	
Total	196		143

On-Site Validation Form

75A
(Obj. 1)

Five public schools and two parochial schools were selected to participate in the development and implementation phases of the project. In addition, five public and one parochial school were selected to serve as control population in the third year of the project.

Criteria for determing matched groups included the following:

(1) Location (rural, suburban, urban)

(2) Ethnic Composition

(3) Similarity of physical plants

(4) Similarity of staffing

(5) Similarity of curriculum

(6) P. M. A. Test Scores

(7) Comparability of overall achievement of students on S. R. A. Assessment survey (Achievement Series E and F, and I.T.E.D. Form X5 and Y5) given in March, 1974.

Rating of Evidence:

0 1 2 [✓ 3]

Objective No. 1

4(f). Examine and verify each instrument used in the evaluation for validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Validation of Evidence:

The locally constructed diagnostic reading tests were used in the analysis. These instruments were developed over a long period of time and have been revised and have gone through limited revision since. Involved in the development of these were the project staff, the reading teachers involved in the project, consultants in the area of reading, and a project evaluator. These instruments were examined for validity and for reliability when they were constructed. The following information is reported here from the technical manual for the diagnostic reading test.

Validity

In order to obtain an estimate of the criterion related validity of the tests, a suitable criterion was sought. It was felt that since the Doren Diagnostic Reading Tests were used extensively in the Parish schools and that many of the subtests of this test appeared to be representative of subtests on the IRIS tests, the Doren test would be an appropriate test to use for comparison. Validity coefficients were computed for the total scores for each of the three locally constructed tests. (Phonic Analysis, Levels I and II and Structural Analysis). In order to obtain the validity coefficients, samples of students were administered both tests. The scores on these tests were then correlated, using the Pearson Product - Moment correlation technique. The resulting correlation coefficients are thus reported as estimates of validity. The validity coefficients for the total test scores ranged from .78 for Structural Analysis to .81 for Level II Phonic Analysis and .94 for Level I Phonic Analysis.

Reliability

The Kuder-Richardson Formula 21 was selected in order to determine an estimate of test reliability for each of the three tests. The resulting reliability coefficients are presented in the following table.

Tests of Reliability
Total Scores Locally Constructed Diagnostic Reading Tests

TEST	MEAN	STANDARD DEVIATION	RELIABILITY COEFFICIENT
Level I Phonic Analysis	223.95	23.23	.95
Level II Phonic Analysis	196.9	19.67	.96
Structural Analysis	209.10	18.37	.95

In addition to the information cited above on validity and reliability, the tests were examined at the time to see if each provided sufficient range and scope for the evaluation of the students that were designated as target groups for the project. The tests were found largely to be successful in this area, that is, of providing a means to assess the gain made by any student who might be chosen for the project.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(g). Persons responsible for data collection should be qualified for their tasks. Review, by objective, the tasks performed in the data collection process and the competencies required to perform those tasks.

If there was no evidence, ask for this information. Identify instruments administered by persons not qualified.

Validation of Evidence:

Data collection for evaluation of this objective was carried out by the project director and the reading coordinator. Each of these persons is trained in the area of testing and evaluation. In addition, the teachers involved in the project have been trained in the administration of the diagnostic tests by the project evaluator with continued follow-up on site by the project director.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(h). Review data verification procedures used for assuring the accuracy of data for each objective. The description should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Validation of Evidence:

Pre and posttest data on students were gathered by Title III teachers and staff who were given in-service training in test administration and data-gathering techniques. The following data verification procedures were used to insure accuracy:

(1) All students in the project were assigned numbers for the purpose of tracking student information in the computer.

(2) Student profile sheets served as an initial source of data gathering for individual student subtest scores on pre and posttests.

(3) Class summary sheets were used to record total test data from individual student profile sheets.

(4) Individual student test data were keypunched from summary sheets and stored on computer tapes.

(5) Data processing returned to Title III staff a print-out of data for correction.

(6) Corrected data were keypunched and stored.

(7) Data processing furnished Title III staff with a print-out of individual student scores for final editing and verifying against initial source data.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(i). For each objective, there should be one or more appropriate data analysis procedure(s) to determine the extent to which objectives were attained.

Review the data analysis procedure(s) for the objective. Identify any objective for which there was no provision for analysis of data or for which the analysis procedure was inappropriate. Explain the inappropriateness. Invalidate all conclusions based on such analysis. If conclusions are invalidated and that objective eliminated from validation, a meeting of the entire validation team should be called to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The project evaluator, Dr. Otis Cox, was responsible for data treatment and interpretation. The analysis of data for this objective included the summarizing of data and computation of means as well as the analysis of covariance in order to test the significance of differences among means. The pretest and posttest scores were read into the computer, and the computer program was developed for the analysis of covariance. This program was tested by the project evaluator and suggestions were made for its improvement. There were further tests and checks on this program to assure that the program was functioning accurately and providing the information needed for interpretation. The computer center provided the evaluator with outputs of data representing the components involved in the analysis of covariance. The analysis of covariance was then further computed by hand for verification and the results were reported in tables.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

5. The evaulation findings reported for each objective in the Application for Validation should give acceptable statistical evidence that the learner performance attainment was met as expected. Verify that the attainment level for each objective was reached and cite the appropriate evidence.

Objectives failing the criterion must be eliminated from further consideration. If the objective is eliminated, a meeting of the entire validation team should be called to determine if the objective was crucial to the significance of the project or practice under validation. Upon such determination, the entire project or practice should be rejected from further validation.

Validation of Evidence:

The results of the statistical analysis for the evaluation of this objective can be found in the tables that follow. The results of the analysis of covariance indicate that the project was successful in reaching the objective. Significant differences were found in the achievement levels of the experimental groups when compared to the achievement level of the control group. The analysis of data for this section will be presented in five parts:

(a) Structural Analysis

(b) Phonics - Level I

(c) Phonics - Level II

(d) Summary of Multiple Comparisons

(e) Supplementary Analyses

(a) Structural Analysis - The analysis of covariance was conducted in order to evaluate the objective is reported in the table that immediately follows.

STRUCTURAL ANALYSIS
SUMMARY OF ANALYSIS OF COVARIANCE

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	2748.98	225195.71	227944.69
Sum of squares: Posttest	12361.11	112424.36	124785.47
Sum of products	-3473.18	121787.76	118314.52
Degrees of freedom	2	243	245
Adjusted sum of squares: Posttest	16813.85	46560.57	63374.42
Degrees of freedom for adjusted sum of squares	2	242	244
Variance estimates	8406.925	192.39904	

$F = 43.695254 \quad p < .01$

This table shows that the F ratio of 43.7 resulting from the analysis was significant at the .01 level. There were statistically significant differences in the performances of the groups. An evaluation of the group means in the following table shows that both experimental groups achieved higher adjusted posttest means than did the control group even though the control group began the experiment with a higher mean than either of the experimental groups.

STRUCTURAL ANALYSIS
SUMMARY OF MEAN SCORES

GROUP	PRETEST MEAN	POSTTEST MEAN	ADJUSTED POSTTEST MEAN
Control	192.83	199.76	192.9297
1 year experimental	179.05	203.11	203.7319
2 year experimental	173.13	195.35	199.2135

These results indicate that the reading program was able to achieve significantly higher gains in the experimental students than was achieved by the control group under the traditional reading program.

(b) Phonics, Level I - The analysis of covariance to test this hypothesis is reported in the table that follows.

PHONIC ANALYSIS - LEVEL I
SUMMARY OF ANALYSIS OF COVARIANCE

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	4170.25	64203.50	68373.76
Sum of squares: Posttest	3892.45	32068.82	35961.27
Sum of products	3940.60	35857.33	39797.93
Degrees of freedom	2	24	126
Adjusted sum of squares: Posttest	253.631	12042.683	12796.314
Degrees of freedom for adjusted sum of squares	2	123	125
Variance estimates	376.815	97.907991	

F = 3.8486644 $p < .05$

The F ratio of 3.85 was significant at the .05 level. This result indicated significant differences existed in the adjusted posttest means for the three (3) groups. An analysis of the adjusted means in the following table shows that the means of both experiment groups was higher than the mean of the control group. Thus, the experimental program was able to produce significant gains in the experimental groups when compared to the control group.

PHONIC ANALYSIS - LEVEL I
SUMMARY OF MEAN SCORES

GROUP	MEAN SCORES		
	PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	203.27	219.13	222.425
1 year experimental	213.37	227.22	224.814
2 year experimental	217.39	234.50	229.909

(c) Phonics, Level II - An analysis of covariance was conducted on the test scores for the Phonic, Level II diagnostic test that was given pretest and posttest to the control and experimental groups. This analysis resulted in a ratio of 11.68 which was significant at the .01 level as indicated in the table that follows.

PHONIC ANALYSIS - LEVEL II
SUMMARY OF ANALYSIS OF COVARIANCE

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	8662.74	144416.02	153078.76
Sum of squares: Posttest	14233.14	128181.78	142414.92
Sum of products	9866.40	116105.14	125971.54
Degrees of freedom	2	209	211
Adjusted sum of squares: Posttest	3912.91	34837.55	38750.46
Degrees of freedom for adjusted sum of squares	2	208	210
Variance estimates	1956.455	167.488	

$F = 11.68$ $p < .01$

This indicated that there were significant differences among the groups even after the analysis of covariance was used. An inspection of the means in the table to follow indicates that both experimental groups scored higher than did the control group in this analysis.

PHONIC ANALYSIS - LEVEL II
SUMMARY OF MEAN SCORES

GROUP	MEAN SCORES		
	PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	168.39	175.94	181.3496
1 year experimental	176.84	191.85	190.23
2 year experimental	189.72	195.65	184.0804

Thus the statistical evidence indicates the superiority of the individualized reading program when compared to the traditional reading program.

(d) Summary of multiple comparison techniques - The following table summarizes the multiple comparisons made to compare individual groups within the significant F ratio analysis for each of the three tests. It can be noted that all but two of these individual comparisons were significant at the .01 level. The Scheffé procedure for multiple comparisons was used.

SUMMARY OF MULTIPLE COMPARISONS
USING THE SCHEFFÉ METHOD

Test	Groups Being Compared	t-ratio	Level of Significance
Structural	Control vs. Experimental I	6.17	.01
	Control vs. Experimental II	3.99	.01
	Experimental I vs. Experimental II	3.10	.01
Phonics - Level I	Control vs. Experimental I	1.36	N.S.
	Control vs. Experimental II	4.81	.01
	Experimental I vs. Experimental II	3.47	.01
Phonic - Level II	Control vs. Experimental I	5.00	.01
	Control vs. Experimental II	1.70	N.S.
	Experimental I vs. Experimental II	4.12	.01

N.S. = Not significant

Experimental I = Students enrolled in the program for the first time this year.

Experimental II = Students who were enrolled in the field testing groups last year and who are participating this year.

(e) Supplementary Analyses - The following section is a complete analysis of the data with all experimental students included in one group. It was felt that this analysis may simplify interpretation by others since there was little difference in the original two experimental groups.

It can be noted that statistically significant differences were determined in favor of the experimental groups over the control group on all three tests. Further examination of the adjusted means reveals the superiority of the achievement of the experimental students.

STRUCTURAL ANALYSIS
SUMMARY OF ANALYSIS OF COVARIANCE

CONTROL GROUPS COMPARED TO ALL EXPERIMENTAL GROUPS COMBINED

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	1912.53	226031.98	227944.51
Sum of squares: Posttest	10916.94	113868.38	124785.32
Sum of products	- 4574.51	122889.03	118314.52
Degrees of freedom	1	244	245
Adjusted sum of squares: Posttest	14355.298	47055.81	61411.108
Degrees of freedom for adjusted sum of squares	1	243	244
Variance estimates	14355.798	193.6453	

$F = 74.13 \quad p < .01$

STRUCTURAL ANALYSIS
SUMMARY OF MEAN SCORES

GROUP	PRETEST MEAN	POSTTEST MEAN	ADJUSTED POSTTEST MEAN
Control	192.83	199.76	192.94
Experimental	177.71	201.36	202.70

PHONIC ANALYSIS, LEVEL I TEST
SUMMARY OF ANALYSIS OF COVARIANCE

CONTROL GROUP COMPARED TO ALL EXPERIMENTAL GROUPS COMBINED

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	3957.28	64416.36	68373.64
Sum of squares: Posttest	3195.81	32765.36	35961.17
Sum of products	3555.43	36242.50	39797.93
Degrees of freedom	1	125	126
Adjusted sum of squares: Posttest	421.887	12374.86	12796.73
Degrees of freedom for adjusted sum of squares	1	124	125
Variance of estimates	421.887	19.147	

F= 22.03 $p < .01$

PHONIC ANALYSIS, LEVEL I
SUMMARY OF MEAN SCORES

GROUP	MEAN SCORES		
	PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	203.27	219.13	221.14
Experimental	214.45	229.18	227.38

On-Site Validation Form

80H
(Obj. 1)

PHONIC ANALYSIS, LEVEL II TEST
SUMMARY OF ANALSIS OF COVARIANCE

CONTROL GROUP COMPARED TO ALL EXPERIMENTAL GROUPS COMBINED

SOURCE OF VARIATION	BETWEEN	WITHIN	TOTAL
Sum of squares: Pretest	5773.79	147304.86	153078.68
Sum of squares: Posttest	13960.38	128454.40	142414.78
Sum of products	8977.82	116993.72	125971.54
Degrees of freedom	1	210	211
Adjusted sum of squares: Posttest	3215.58	35534.66	38750.24
Degrees of freedom for adjusted sum of squares	1	209	210
Variance estimates	3215.50	170.02	

F= 18.91 $p < .01$

PHONIC ANALYSIS, LEVEL II
SUMMARY OF MEAN SCORES

GROUP	MEAN SCORES		
	PRETEST	UNADJUSTED POSTTEST	ADJUSTED POSTTEST
Control	168.39	175.94	181.03
Experimental	179.06	192.53	189.19

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

6. Review and verify the evidence supporting the conclusions that the findings for each objective are educationally significant.

Validation of Evidence:

The statistical evidence indicated that the students in the experimental groups achieved a higher mean score than the students in the control group. This was not accomplished without additional evidence that the project has significance for education. An overall approach to the 4 objectives being evaluated in this validation study would indicate that teachers achieved the goals set for them in in-service. Teachers attitudes changed favorably toward the components of the project. Students enrolled in the project achieved higher level than students outside the project. Students' attitudes improved toward the project in most categories of reading concepts. Thus the overall results is that here is a project that not only achieves a cognitive goal but relates to both faculty and students in a positive way. Furthermore it is noted that emphasis due to project thrust was placed on reading at the secondary level. Project emphasis also stimulated a parish wide interest in the basic reading program. Finally the diagnosis, prescription, treatment and post-assessment approach has become a major focus at other curriculum areas, specifically general business.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

7. The evaluation supports the conclusion that the associated learner change implicit in the attainment of the objective was directly associated with project activities. Examine the conclusions drawn from the evaluation evidence for the objective for the purposes of verifying that the evidence supports the probability that learner change was associated with project activities; examine the conclusions to determine the generalizability of the findings.

   Objectives failing the criterion must be eliminated from further consideration.

   Validation of Evidence:

   The program was effective in producing higher statistical significant means in the experimental groups when compared to the control groups.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Project objective(s) identified for validation have been attained and the performance of the learners has been improved.

Objective No. 2

1. Review the structure of the objectives presented in application for Validation, Part II. Determine if the objective contains the necessary specifications to render it measurable at a given point in time. The specifications must include: (1) who is able to do what, (2) at what level of performance, and (3) under what conditions. Any objective not meeting the necessary specifications of measurability must be eliminated from further investigation and validation. Include an explanation of the deficiencies. If the objective to be eliminated is crucial to the significance of the project or the practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

Students in grades 3, 4, 7, and 9 who participate in the IRIS program will demonstrate a significantly greater (.05 level) gain in attitude toward selected reading concepts than control group students as measured by the Semantic Differential.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

2. Examine and verify the needs assessment procedures and findings for the nominated objective and determine the adequacy of the evidence of need to justify the selection of the objective.

Validation of Evidence:

The data cited in the assessment of needs for Objective 1 indicate a clear need for a reading improvement program. In most educational settings the staff and faculty are concerned about the attitudes of the person as well as trying to change him cognitively in order to achieve a goal. It was assumed by Title III staff and was confirmed by the pretest assessment of student attitudes on a locally constructed attitude survey that students who are deficient in reading also have a need for a change in their attitude toward reading. It was felt by the staff and teachers that if students improved their ability to read that the student attitude toward reading would also show significant improvement. This objective represented an attempt to measure the attitudinal change that might result with the individuals involved as they pursued the individualized reading program. The attitudes chosen by the reading consultant and the reading coordinator were those of selected reading concepts which were deemed to be pertinent to a person's overall attitude toward reading.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

3. Examine and verify the intervention process for this objective including where appropriate the following elements: grade levels, number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental-community involvement, preservice/inservice training, etc.

Validation of Evidence:

The intervention process with students in grades 3, 4, 7, and 9 was described for Objective 1 in terms of the cognitive intervention involved. There was no attempt to change the attitude of the person per se within the reading program. Emphasis was placed on students working at their level, at their own rate, with competition centered entirely around self-improvement. An evaluation following treatment to measure success provided the impetus whereby students could feel comfortable and relaxed in the reading-learning process. Also the record keeping system of the project enabled students to be aware at all times of their progress, and enabled them to set individual goals based on their interpretation of their past successes and accomplishments. This objective represented an attempt to measure the change that would occur because of the involvement in the program. Therefore, the intervention that was involved here was the same intervention as Objective 1 with no particular program assigned primarily to produce attitudinal change.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(a). Each objective must have an evaluation design which will provide the information necessary to determine if the learner change occurred at the levels specified in the objective.

Review the evaluation design for each objective for the purpose of determining that implementations of the design yielded information for rendering conclusions about the attainment of the objective. (In the absence of such a design, the validator should eliminate the objective from further investigation and discuss the discrepancies encountered in the evaluation design). If the objective to be eliminated is crucial to the significance of the project or practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

Students were tested in this project, both pretest and posttest, using the semantic differential developed by C. E. Osgood, et al., at Harvard University. The evaluation design was taken from Campbell and Stanley and involves the subtraction of pretest scores from posttest scores. These differences were then used to test for statistical significance between groups using the t-ratio for independent groups. So the statistical tests will be tests of significant differences of mean gains, rather than of mean scores. This design was selected for its simplicity and as a means of providing for persons starting the program both in experimental and control groups to have differences in pretest scores.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(b). Review the procedures for data collection for each objective. The description of the procedures should include types of data collected, the persons responsible, timelines, methods of data collection, etc.

Validation of Evidence:

Procedures for data collection for this objective were as follows: The reading coordinator and project director were responsible for administering all tests. These were brought to the Central Office and scored by the staff, and the pretest scores recorded. Upon completion of the posttests, these tests were scored at the office and the posttest scores recorded. Then the pretest scores were subtracted from the posttest scores, and the differences recorded for each separate concept evaluated as well as for the total scores. The testing schedule was completed as indicated in the Pre - Post Semantic Differential Test Schedule.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(c). Review the sampling technique used for each objective. Verify the reported sample size, selection techniques and evidence of representativeness.

If sampling was not used, write NA (not applicable) in the space marked 4(c) on the Effectiveness/Sucess Summary Sheet.

Validation of Evidence:

In this section, for Objective 1, it was described that all the persons who were in the experimental group were tested and that a control group was selected to match those persons. Except for the selection of the control group, there was no sampling procedure. See the explanation of the control group selection in Part II, No. 4(e).

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(d). Review the evidence that supports the project's claim that the program intervention was the cause of the attainment of the objective(s).

Validation of Evidence:

The experimental group of students received treatment related to reading improvement and attitudinal change directly related to the purpose of the project. Pretests were administered and the differences that were achieved can be attributed to the time interval between pretest and posttest.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(e). Review the procedures used to select control groups. Verify that the procedures used do not violate the underlying assumptions of a "control group".

Where procedures are "not applicable," write NA in the space marked 4(e) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

The procedure for selecting the control group is the same as 4(e) for Objective 1.

Using a pretest - posttest control group design for the third year of the project, 196 students in grades 3, 4, 7, and 9 of the project schools were matched with 143 students from 6 control schools to participate in the project.

The distribution of the target population is as follows:

	Experimental Group		Control Group
Grade Level	Students treated in project for 1 year	for 2 years	No treatments
3	31	0	34
4	18	18	26
7	36	10	49
9	70	13	34
Sub-Total	155	41	
Total	196		143

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(f). Examine and verify each instrument used in the evaluation for validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Validation of Evidence:

The instrument used in the evaluation of this objective was the semantic differential developed by C. E. Osgood and others at Harvard University. The semantic differential consists of a series of paired adjectives each of which represents a dichotomy. The student, then, is given a concept to consider and he rates that concept on the extreme between these two adjectives such as between good and bad. The positive end of each adjective scale is given the high score, and the negative end is given the low scores. Good would be 3 points; bad would be 1 point. The adjective pairs that were selected for the semantic differential were those developed and used by Osgood and that have been factor analyzed and studied by his group in order to arrive at a set of adjectives that would elicit certain responses. There was no attempt made to select adjectives in order to derive factor scores as is done many times with the semantic differential. A total score was all that was involved on each of the concepts to be evaluated in terms of the semantic differential. The semantic differential was chosen primarily because of the fact that the concepts to be evaluated were rather specific and not to be found on another available instrument. It was also determined that the semantic differential was as effective as any instrument in eliciting the true connotative meaning that a person applies to a given concept. Thus, the project director, coordinator, reading consultant, and evaluator judged that this instrument was more effective in meeting the needs of this particular evaluation than was any other instrument.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(g). Persons responsible for data collection should be qualified for their tasks. Review, by objective, the tasks performed in the data collection process and the competencies required to perform those tasks.

If there was no evidence, ask for this information. Identify instruments administered by persons not qualified.

Validation of Evidence:

The data were collected by Mr. Walter Gatlin, Director of the Project, and Mrs. Eva Parks, Reading Coordinator for the Project. None of the instruments utilized required special training, other than the project evaluator instructing the project director and reading coordinator on how to administer the test and how to score the test.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(h). Review data verification procedures used for assuring the accuracy of data for each objective. The description should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Validation of Evidence:

The data were gathered, as stated earlier, and scored by the project staff under supervision of the project director and the reading coordinator. The scoring procedures were verified by rescoring selected tests. The data were then summarized on charts for each individual. When the posttests were administered, the scoring and recording was carried out in a similar fashion. Then the project staff subtracted the pretest scores from the posttest scores getting the difference, the gain for each person, and the total gain/loss for each person. All steps in this process were verified including the statistical computations. Statistical computation of the t-ratio was performed twice on a random basis to check for accuracy. The Olivetti Programma 101 calculator was used for these computations. The program has been verified as to its accuracy.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(i). For each objective, there should be one or more appropriate data analysis procedure(s) to determine the extent to which objectives were attained.

Review the data analysis procedure(s) for the objective. Identify any objective for which there was no provision for analysis of data or for which the analysis procedure was inappropriate. Explain the inappropriateness. Invalidate all conclusions based on such analysis. If conclusions are invalidated and that objective eliminated from validation, a meeting of the entire validation team should be called to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The evaluator, Dr. Otis Cox, was responsible for project data analysis procedures. As was stated earlier, the pretest scores were subtracted from the posttest scores and the differences were used in making the analyses. Using the t-ratio for independent groups, the control group was compared to the experimental group.

The primary analysis was in terms of a total gain/loss score for all concepts combined. The analysis of control vs. experimental was also made as a separate analysis for each of the reading concepts involved.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

5. The evaluation findings reported for each objective in the Application for Validation should give acceptable statistical evidence that the learner performance attainment was met as expected. Verify that the attainment level for each objective was reached and cite the appropriate evidence.

Objectives failing the criterion must be eliminated from further consideration. If the objective is eliminated, a meeting of the entire validation team should be called to determine if the objective was crucial to the significance of the project or practice under validation. Upon such determination, the entire project or practice should be rejected from further validation.

Validation of Evidence:

The analysis of data for the total scores showed that the experimental group gained 7.6 points overall from pretest to posttest while the control group lost 4.5 points. In other words, there was a difference of 12 points between experimental group and control group on the mean differences from pretest to posttest. When this was tested for significance using the t-ratio for independent groups, a t-ratio of 3.812 was obtained which was significant at the .001 level.

The results were then analyzed for significance by testing separately each concept that students were asked to rate. Of 17 concepts that were selected, most of the results showed that there was more attitudinal gain by the experimental group than by the control group. A summary of the results indicates that of the 17 concepts evaluated, seven of them showed significant gain for the experimental group over the control group. Eight others showed a gain for the experimental group over the control group that were not statistically significant, and 2 showed a difference in favor of the control group. In addition, the control group showed a loss in 10 concepts tested compared to a loss in only 2 concepts for the experimental group. These results are summarized in the Summary of Tests of Significance Selected Reading Concept As Measured by the Semantic Differential and the Mean Gain (Posttest-Pretest) Chart.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

6. Review and verify the evidence supporting the conclusions that the findings for each objective are educationally significant.

Validation of Evidence:

As indirect evidence of student attitudinal change the following attendance data indicates a higher percentage for the experimental group than the control group:

	Grade	#of Students	Total Days Enrolled	Total Days Absent	%
Control	3	26	3900	160	4.1
	4	15	2250	94	4.1
	7	38	5700	286	5.0
	9	34	5005	420	8.3
Experimental	3	22	3270	121	3.7
	4	24	3600	119	3.3
	7	36	5400	207	3.8
	9	65	9578	622	6.4

Observations cited by the director, reading coordinator, and the evaluator add supporting evidence to the educational significance of the project.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

7. The evaluation supports the conclusion that the associated learner change implicit in the attainment of the objective was directly associated with project activites. Examine the conclusions drawn from the evaluation evidence for the objective for the purposes of verifying that the evidence supports the probability that learner change was associated with project activities; examine the conclusions to determine the generalizability of the findings.

Objectives failing the criterion must be eliminated from further consideration.

Validation of Evidence:

The objective was achieved when all concepts are considered together as a total attitudinal score. That is, when total scores are considered, the experimental group is superior to the control group in attitudinal gain during the course of the project. Too, when individual concepts are considered, the experimental group shows more favorable attitude in many more areas than does the control group. For example, there were fewer negative mean scores (losses in attitudinal scores) in the experimental group than in the control group where this was evidenced some 10 times on 10 separate concepts.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Project objective(s) identified for validation have been attained and the performance of the learners has been improved.

Objective No. 3

1. Review the structure of the objectives presented in application for Validation, Part II. Determine if the objective contains the necessary specifications to render it measurable at a given point in time. The specifications must include: (1) who is able to do what, (2) at what level of performance, and (3) under what conditions. Any objective not meeting the necessary specifications of measurability must be eliminated from further investigation and validation. Include an explanation of the deficiencies. If the objective to be eliminated is crucial to the significance of the project or the practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

Teachers participating in the in-service education program for the IRIS project will demonstrate a significant gain (.05 level) in selected reading skills and knowledge as demonstrated by a pretest-posttest assessment using the Performance Competency Self Assessment for In-service Education.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

2. Examine and verify the needs assessment procedures and findings for the nominated objective and determine the adequacy of the evidence of need to justify the selection of the objective.

Validation of Evidence:

The assessment of needs that was performed in the parish and used as a basis for the student needs in this program implies the need for teacher improvement in order to facilitate the gains in the reading achievement by the students. Therefore, this was the basis for the in-service program that was conducted during the 1974-75 school year. The evidence of the need in this area is the pretest that was administered to the teachers prior to the beginning of the in-service program.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

[illegible] Examine and verify the intervention process for this objective including where appropriate the following elements: grade levels, number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental-community involvement, pre-service/in-service training, etc.

Validation of Evidence:

The intervention process for this objective involves an in-service program designed toward improving project personnel competencies in various phases of reading and individualized instruction. The in-service course designed for staff and faculty was taught by Dr. Mildred Bailey, Director of Reading at Northwestern State University. The course was built around the specific skills and knowledge as evaluated in Objective no. 3. The course was designed for 18 weeks, meeting one afternoon a week for three (3) hours. In addition to the course on Individualizing of Reading Instruction, on-site in-service sessions were conducted by project personnel as evidenced by in-service agenda, summary reports, and completed registration forms.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(a). Each objective must have an evaluation design which will provide the information necessary to determine if the learner change occurred at the levels specified in the objective.

Review the evaluation design for each objective for the purpose of determining that implementation of the design yielded information for rendering conclusions about the attainment of the objective. (In absence of such a design, the validator should eliminate the objective from further investigation and discuss the discrepancies encountered in the evaluation design). If the objective to be eliminated is crucial to the significance of the project or practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The evaluation design provided for this objective was a pretest - posttest design. Teachers were administered a pretest with a self evaluation device wherein they were to rate themselves as being competent, highly competent, fairly competent, or having little or no competence. This instrument was used also in a post assessment after the in-service director had provided training. Teachers who demonstrated the skill on the pretest were not required to participate in the training for that particular skill. The chi-square technique was used to test for statistical significance. The results of these tests of statistical significance can be found in the table that appears in Part II, number 5.

Rating of Evidence:

0 1 2 [✓ 3]

PART II-- Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(b). Review the procedures for data collection for each objective. The description of the procedures should include types of data collected, the persons responsible, timelines, methods of data collection, etc.

Validation of Evidence:

Person responsible	Dr. Mildred Bailey, Reading Instructor
Type of Instrument	Self assessment rating scale
Pretest date	September, 1974
Posttest date	December, 1974

The pretest and the posttest were adminsitered in a group situation. Teachers were asked to rate themselves upon the ability and skills in the various areas. The person requiring the administering of the scale was present throughout the time of the testing. No unusual circumstances at either testing session were reported.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(c). Review the sampling techniques used for each objective. Verify the reported sample size, selection techniques and evidence of representativeness.

If sampling was not used, write NA (not applicable) in the space marked 4(c) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

Sampling procedures were not used. All the teachers that were involved in the in-service program were tested. This involved 18 persons.

Rating of Evidence:

0 1 2 3 [✓ N/A]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(d). Review the evidence that supports the project's claim that the program intervention was the cause of the attainment of the objective(s).

Validation of Evidence:

In an in-service program such as occurred, the teachers were assessed by a pretest before the treatment and posttest followed the activity. It is assured, of course, in this situation, one expects a gain to occur and in many situations it is possible to attribute this gain to the actual intervention of the treatment. Teachers were not involved in any other in-service program during this time. There were no special programs offered for teachers in the area. None of the faculty took trips to conferences or workshops during this period of time. So any formal training that they received during the period of time from pretest to posttest occurred in the in-service program. It is evident from 4(b) that proper procedures were followed in data collection. The primary contributor to the gain in skills evidenced by the faculty during the project appears to be the product of in-service training activities.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(e). Review the procedures used to select control groups. Verify that the procedures used do not violate the underlying assumptions of a "control group."

Where procedures are "not applicable", write NA in the space marked 4(e) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

Not Applicable

Rating of Evidence:

0 1 2 3 [✓ N/A]

PART II-- Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(f). Examine and verify each instrument used in the evaluation for validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Validation of Evidence:

The instrument that was used to assess Objective no. 3 was developed locally by the reading consultant in the project, Dr. Mildred Bailey. This instrument was brought to the project evaluator for evaluation and analysis. Some suggestions were made as to format and particular details of the instrument. The instrument was adminsitered to the group. It was a rating scale requiring only a choice among three (3) alternatives by the participants. The stated skills and knowledge areas that were included represent a broad spectrum of skills and knowledge areas within the reading field. These competencies were deemed necessary by the reading consultant based on previous experience with teachers in the school system. It was felt by the project evaluator that the instrument has content validity for the skills indicated. Since this is a rating scale it is subject to the weaknesses that are attributed to rating scales as to level of data and reliability of the responses of the participants. However it was the judgement of the evaluator and the reading consultant that a locally constructed instrument would provide a more suitable knowledge base by which to analyze the in-service program than would an instrument developed by persons at other institutions or standardized instruments which are not specific to the in-service program being evaluated.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(g). Persons responsible for data collection should be qualified for their tasks. Review. by objective, the tasks performed in the data collection process and the competencies required to perform those tasks.

If there was no evidence, ask for this information. Identify instruments administered by persons not qualified.

Validation of Evidence:

Dr. Mildred Bailey was responsible for data collection for this objective. Dr. Bailey, a copy of whose credentials are included in this evaluation instrument, is well qualified for the task of administering reading tests and attitude scales related thereto. There was no special training required for the administration of this test. The staff and the evaluator are confident in the reliability and the skills of Dr. Bailey and the data collection procedures that were involved.

Rating of Evidence:

0 1 2 [✓ 3]

PART II-- Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(h). Review data verification procedures used for assuring the accuracy of data for each objective. The description should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Validation of Evidence:

The tests were collected and given to the Project Director and Reading Coordinator for scoring and for conversion to percentages. Each test was scored twice and the percentages were computed by printing calculator to assess the accuracy of the computations.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(i). For each objective, there should be one or more appropriate data analysis procedure(s) to determine the extent to which objectives were attained.

Review the data analysis procedure(s) for the objective. Identify any objective for which there was no provision for analysis of data or for which the analysis procedure was inappropriate. Explain the inappropriateness. Invalidate all conclusions based on such analysis. If conclusions are invalidated and that objective eliminated from validation, a meeting of the entire validation team should be called to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The scores were given to the evaluator for data analysis. Provision was made to test for statistical significance. The three (3) categories selected below for each question or each skills areas were tested for significant shifts toward competence from pretest to posttest; in other words, there was a 2 by 3 paradigm showing pretest and posttest on the rows and three (3) levels of skills in the columns.

LEVEL OF COMPETENCY

		Highly	Moderate	Low	
Test	PRE				Row Total
	POST				Row Total
		Column Total	Column Total	Column Total	Total Observations

Rating of Evidence:

0 1 2 [✓ 3]

On-Site Validation Form

80A
(Obj. 3)

TESTS OF SIGNIFICANCE

PERFORMANCE COMPETENCY SELF-ASSESSMENT FOR IN-SERVICE EDUCATION

COMPETENCY	CHI-SQUARE	LEVEL OF SIGNIFICANCE
1. Familiarity with professional organization devoted to reading education.	14.724	.001
2. Familiarity with professional journals in reading education.	21.188	.001
3. Familiarity with and can effect in the classroom findings of recent significant research in reading instruction.	25.755	.001
4. Possess thorough knowledge of methods of reading instruction:		
a. Basal reading approach	14.686	.001
b. Veatch's individual approach	23.212	.001
c. i/t/a/ approach	26.765	.001
d. Words in Color approach	29.230	.001
e. Programmed approach	20.250	.001
f. Fernald Method	21.072	.001
g. Language experience approach	18.797	.001
5. Understand and can teach a direct reading activity to an individual or small group of children.	26.000	.001
6. Understand language differences of, and can plan reading programs for, children who speak divergent dialects.	22.250	.001
7. Have thorough knowledge of the various word attack skills.	8.577	.02
8. Can structure individual instructional materials designed to treat weaknesses in specific reading skills.	18.492	.001
9. Can develop evaluation instruments to measure treatment for weaknesses in specific reading skills.	18.332	.001

PART II-- Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

6. Review and verify the evidence supporting the conclusions that the findings for each objective are educationally significant.

Validation of Evidence:

More and more in the field of education it is required of teachers that they be knowledgeable in the area of reading and possess a wide range of skills. No longer are project teachers inclined to teach only from a basal text but rather are exploring wide sources of materials to help students on an individual basis. Furthermore it is significant that emphases is being given to teaching of reading at the secondary school level.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

7. The evaluation supports the conclusion that the associated learner change implicit in the attainment of the objective was directly associated with project activities. Examine the conclusions drawn from the evaluation evidence for the objective for the purposes of verifying that the evidence supports the probability that learner change was associated with project activities; examine the conclusions to determine the generalizability of the findings.

   Objectives failing the criterion must be eliminated from further consideration.

   Validation of Evidence:

   Based upon the evidence presented to show the attainment of objective no. 3 the following conclusion was drawn:

   > The teachers made significant and substantial gains in knowledge and skills based upon their in-service program.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

> Project objective(s) identified for validation have been attained and the performance of the learners has been improved.

Objective No. 4

1. Review the structure of the objectives presented in application for Validation, Part II. Determine if the objective contains the necessary specifications to render it measurable at a given point in time. The specifications must include: (1) who is able to do what, (2) at what level of performance, and (3) under what conditions. Any objective not meeting the necessary specifications of measurability must be eliminated from further investigation and validation. Include an explanation of the deficiencies. If the objective to be eliminated is crucial to the significance of the project or the practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

   Validation of Evidence:

   Teachers participating in the IRIS program will show a significant increase (.05 level) in attitude toward use of the basic components of the IRIS Reading Kit as measured by the Teacher Appraisal of the IRIS Reading Kit.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

2. Examine and verify the needs assessment procedures and findings for the nominated objective and determine the adequacy of the evidence of need to justify the selection of the objective.

Validation of Evidence:

In the needs assessments section for Objectives No. 1 and No. 2, a large quantity of data were cited justifying the need for a reading improvement program in Rapides Parish. Based upon these data, the computer-managed reading system was anticipated. In order to fully implement the program, it was not only necessary to develop essential elements of the program relative to diagnosis, prescription, treatment and post-assessment, but also to provide for essential training of teachers in the utilization of such elements. Thus it is within this area that extensive in-service training was considered to be a priority need. It was considered essential that teachers become knowledgeable of how to apply the essential elements and must also have a favorable attitude toward using them.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Sucess (cont.)

Objective No. 4

3. Examine and verify the intervention process for this objective including where appropriate the following elements: grade levels, number of participants, period of operation, curricula, special materials, staffing, facilities, scheduling patterns, parental-community involvement, preservice/inservice training, etc.

Validation of Evidence:

In the third year of the in-service program intervention was, as far as teacher training was concerned, comprised of instruction provided by Dr. Mildred Bailey of Northwestern State University in the form of an in-service course for staff and faculty. This course was supplemented by the on-site in-service sessions by Mr. Gatlin, Project Director, and Mrs. Parks, Reading Coordinator to the project. The course was built around the specific skills and knowledge as evaluated in Objective No. 3. The in-service sessions in the schools were provided to further familiarize the project personnel with the use of the kit and also with new materials as they arrived and were distributed. In-service activities were apparent as documented by memorandums and summary reports on file in the project director's office.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(a). Each objective must have an evaluation design which will provide the information necessary to determine if the learner change occurred at the levels specified in the objective.

Review the evaluation design for each objective for the purpose of determining that implementation of the design yielded information for rendering conclusions about the attainment of the objective. (In the absence of such a design, the validator should eliminate the objective from further investigation and discuss the discrepancies encountered in the evaluation design). If the objective to be eliminated is crucial to the significance of the project or practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

In evaluating Objective No. 4, a pretest-posttest was used. The evaluation instrument was used at the beginning of the project to assess teacher attitudes toward the diagnostic tests, materials retrieval manual, and criterion referenced tests. Assessment was also made later in the school year to assess any change in attitude toward the elements of the computer-managed system as teachers continued to make application of the system. The baseline data for the assessment was of course the pretest and the type of data that was gathered was ordinal.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(b). Review the procedures for data collection for each objective. The description of the procedures should include types of data collected, the persons responsible, timelines, methods of data collection, etc.

Validation of Evidence:

Data were collected prior to conducting in-service activities using a Likert-type scaled instrument as the pretest. On each of the 3 basic components of the project (diagnostic tests, materials retrieval manual, and criterion referenced tests), each was assessed on a five point scale. Subsequent to in-service training, the same instrument was administered as the posttest. Mr. Gatlin, Project Director, and Mrs. Parks, Reading Coordinator for the project, were responsible for administering and gathering data. The type of data obtained was ordinal.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(c). Review the sampling technique used for each objective. Verify the reported sample size, selection techniques and evidence of representativeness.

If sampling was not used, write NA (not applicable) in the space marked 4(c) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

Sampling was not used in the evaluation of this objective. All the persons involved were tested both pre and post. This section is not applicable.

Rating of Evidence:

0 1 2 3 [✓ N/A]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(d). Review the evidence that supports the project's claim that the program intervention was the cause of the attainment of the objective(s).

Validation of Evidence:

The teachers involved in this project participated in the in-service program and used the IRIS reading components in their instructional program as evidenced by in-service training agenda, registrations, summary reports, and on-site observations by the Validation Team. No other major professional activities sponsored by the school system were involved that could provide learning in this area or could have contributed significantly to promoting attitudinal change. By pre-post assessment of the gain that was made during that period of time, it is reasonable that changes that occurred can be attributed to the involvement of teachers in the in-service activities.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(e). Review the procedures used to select control groups. Verify that the procedures used do not violate the underlying assumptions of a "control group."

Where procedures are "not applicable," write NA in the space marked 4(e) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

No control group was involved in the pre-post design.

Rating of Evidence:

0 1 2 3 [✓ N/A]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(f). Examine and verify each instrument used in the evaluation for validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured.

Validation of Evidence:

The instrument that was used for this assessment was a Likert-type scale for each of the 3 areas of the kit that was assessed. Those 3 areas were diagnostic tests, materials retrieval manual, and criterion referenced tests. As the instrument was locally developed, it was not standardized on any other population. The data was ordinal and was tested as ordinal data using the Friedman 2-way analysis of variance of ranks technique. The teachers were asked to rate the basic components of the kit. The staff and evaluator feels that this means was as effective as any available for assessing the gain in attitude toward these basic components. It was not possible to use an externally developed instrument.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(g). Persons responsible for data collection should be qualified for their tasks. Review, by objective, the tasks performed in the data collection process and the competencies required to perform those tasks.

If there was no evidence, ask for this information. Identify instruments administered by persons not qualified.

Validation of Evidence:

The persons who were responsible for data collection were qualified for their tasks. The data collection was supervised by the project evaluator. Mr. Gatlin, Project Director, and Mrs. Parks, Reading Coordinator, were trained in the administration of the instrument and related data collection procedures. Scoring was supervised and verified for accuracy by Dr. Cox, Project Evaluator.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(h). Review data verification procedures used for assuring the accuracy of data for each objective. The description should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Validation of Evidence:

Data verification procedures included the rescoring of tests by sampling and a check of the recording of the scores on the control sheet by sampling procedures also. These procedures were carried out by the project director, evaluator, and reading coordinator. The scores were converted to rank order data by the project evaluator, and the computation of the statistical technique was performed twice by electronic calculator to assure accuracy.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

4(i). For each objective, there should be one or more appropriate data analysis procedure(s) to determine the extent to which objectives were attained.

Review the data analysis procedure (s) for the objective. Identify any objective for which there was no provision for analysis of data or for which the analysis procedure was inappropriate. Explain the inappropriateness. Invalidate all conclusions based on such analysis. If conclusions are invalidated and that objective eliminated from validation, a meeting of the entire validation team should be called to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The scores from the rating scales were converted to ranks; that is, it was indicated whether a person ranked higher on the pretest than on the posttest, etc. These ranks were then tested for statistical significance by use of the Friedman two-way analysis of variance of ranks technique. Dr. Otis Cox, Project Evaulator, performed the analysis of these data.

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

5. The evaluation findings reported for each objective in the Application for Validation should give acceptable statistical evidence that the learner performance attainment was met as expected. Verify that the attainment level for each objective was reached and cite the appropriate evidence.

Objectives failing the criterion must be eliminated from further consideration. If the objective is eliminated, a meeting of the entire validation team should be called to determine if the objective was crucial to the significance of the project or practice under validation. Upon such determination, the entire project or practice should be rejected from further validation.

Validation of Evidence:

The table that follows shows the results of the statistical analysis of this objective. The Friedman two-way analysis of variance of ranks technique used resulted in a chi-square value to be tested. In the test of each of the 3 components or the kit, the attitudinal change in favor of use of the components (diagnostic tests, materials retrieval manual, and criterion-referenced tests) was significant at the .001 level. Since it was anticipated to accept as being statistically significant any result significant beyond the .05 level, these results are even more meaningful. The test of significance of differences in attitude toward the diagnostic tests resulted in a chi-square of 21.33 that reflects significant positive attitudes of teachers by the end of the experimental period. The test of attitudinal change toward the use of the materials retrieval manual resulted in a chi-square value of 16.33 that reflects significant positive attitudes of teachers by the end of the experimental period. Also, the test of attitudinal change regarding the criterion-referenced tests resulted in a chi-square value of 14.81 that indicates significant positive attitudes of teachers by the end of the experimental treatment. In all cases, therefore, the teachers became more favorably disposed toward the use of the 3 components (diagnostic tests, materials retrieval manual, and criterion-referenced tests).

On-Site Validation Form

80A
(Obj. 4)

TESTS OF SIGNIFICANCE OF DIFFERENCES OF RANKS
FACULTY ATTITUDES TOWARD COMPONENTS OF THE KIT
FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE OF RANK

COMPONENT	χ_r^2	LEVEL OF SIGNIFICANCE
1. Diagnostic Tests	21.33	.001
2. Retrieval Manual	16.33	.001
3. Criterion Tests	14.81	.001

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

6. Review and verify the evidence supporting the conclusions that the findings for each objective are educationally significant.

Validation of Evidence:

The overall acceptance of the use of the components as well as toward the total program indicates that the program has been having a very positive effect on the teachers involved as evidenced by on-site observations and interviews of school system personnel conducted by the Validation team.

In addition evidence of educational significance relating to attitudes toward the components of the program emphasized in teacher in-service training is demonstrated by the application of similar skills/concepts to the curriculum area of general business* within the district.

* Personalizing General Business Instruction, ESEA, Title III, Rapides Parish School Board, p. 19

Rating of Evidence:

0 1 2 [✓ 3]

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 4

7. The evaluation supports the conclusion that the associated learner change implicit in the attainment of the objective was directly associated with project activities. Examine the conclusions drawn from the evaluation evidence for the objective for the purposes of verifying that the evidence supports the probability that learner change was associated with project activities; examine the conclusions to determine the generalizability of the findings.

Objectives failing the criterion must be eliminated from further consideration.

Validation of Evidence:

The conclusion to be drawn from analysis of the data for this objective is:

> Teachers demonstrated a positive attitude toward in-service training related to diagnostic tests, materials retrieval manuals, and criterion-referenced tests.

Rating of Evidence:

0 1 2 [✓ 3]

On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success

SUMMARY RATING

Evidence of Effectiveness/Success Items	Rating Points Nominated Objectives by Number 1	2	3	4	5	6	7
*1. Measurability of Objective	3	3	3	3			
2. Needs determination	3	3	3	3			
3. Intervention process	3	3	3	3			
*4(a). Evaluation design	3	3	3	3			
4(b). Data Collection	3	3	3	3			
4(c). Sampling technique	3	3	N/A	N/A			
*4(d). Evidence of effectiveness	3	3	3	3			
*4(e). Control group selection	3	3	N/A	N/A			
4(f). Evaluation Instruments	3	3	3	3			
4(g). Qualified personnel	3	3	3	3			
*4(h). Data accuracy	3	3	3	3			
*4(i). Data analysis procedures	3	3	3	3			
*5. Statistical evidence of attainment of objective	3	3	3	3			
*6. Educational significance of attainment of objective	3	3	3	3			
*7. Learner change and generalizability..	3	3	3	3			

Summed Rating Points must total 42 for Validation. A score of 39 is possible for Validation if either 4c or 4e is Not Applicable (N.A.) or a score of 36 is possible for Validation if both 4c and 4e are N. A.

PART III--Validation of Evidence on Resource Specifications

Resource Specifications: Information on start-up, operational and management costs which, when combined with Part II, Effectiveness/Success, and Part IV, Exportability data, will help an interested school district make an informed decision about adoption/adaption of the practice.

DIRECTIONS:

On-site validation cost is based on the evidence reported in the Application for Validation, Part III, Resource Specifications, and the accompanying supporting documents.

PART III--Validation of Evidence on Resource Specifications (cont.)

1. Examine and verify the evidence related to the estimated start-up, operational, and management costs for replication of the project and the method used to determine the costs.

Validation of Evidence:

The start-up operational and management costs have been calculated under four options for consideration of adoption by consumer schools.

Option I - For adopting the total IRIS Reading Management System with a school district having a computer.

TOTAL START-UP COST - $ 2,552.00
TOTAL MANAGEMENT COST - $ 3,600.00
TOTAL OPERATIONAL COST - $13,303.00

Option II - For adopting the total IRIS Reading Management System with a school district renting or contracting computer services.

TOTAL START-UP COST - $ 2,830.00
TOTAL MANAGEMENT COST - $ 4,350.00
TOTAL OPERATIONAL COST - $13,371.00

Option III - For adopting the total IRIS Reading Management System with a school district not using computer services.

TOTAL START-UP COST - $ 2,456.28
TOTAL MANAGEMENT COST - $ 3,600.00
TOTAL OPERATIONAL COST - $13,131.00

Option IV - For adopting only the testing program of the IRIS Reading Management System.

TOTAL START-UP COST - $ 1,487.24
TOTAL MANAGEMENT COST - $ 1,875.00
TOTAL OPERATIONAL COST - $ 2,406.00

The Validation Team examined the financial records reflected in the Validation Report and certified their accuracy as presented by the project director.

PART III--Validation of Evidence on Resource Specifications (cont.)

2. Examine and verify the evidence related to the estimated per-learner start-up operational and management costs for the purpose of replication in a similar environment.

Validation of Evidence:

The per-pupil start-up operational and management costs have been calculated under four options for consideration of adoption by consumer schools.

Option I - For adopting the total IRIS Reading Management System with a school district having a computer.

TOTAL PER LEARNER START-UP COST - $ 8.51
TOTAL PER LEARNER MANAGEMENT COST - $ 12.00
TOTAL PER LEARNER OPERATIONAL COST - $ 44.34

Option II - For adopting the total IRIS Reading Management System with a school district renting or contracting computer services.

TOTAL PER LEARNER START-UP COST - $ 10.43
TOTAL PER LEARNER MANAGEMENT COST - $ 14.50
TOTAL PER LEARNER OPERATIONAL COST - $ 44.57

Option III - For adopting the total IRIS Reading Management System with a school district not using computer services.

TOTAL PER LEARNER START-UP COST - $ 8.19
TOTAL PER LEARNER MANAGEMENT COST - $ 12.00
TOTAL PER LEARNER OPERATIONAL COST - $ 43.77

Option IV - For adopting only the testing program of the IRIS Reading Management System.

TOTAL PER LEARNER START-UP COST - $ 4.96
TOTAL PER LEARNER MANAGEMENT COST - $ 6.25
TOTAL PER LEARNER OPERATIONAL COST - $ 8.02

The Validation Team examined the financial records reflected in the Validation Report and certified their accuracy as presented by the project director.

PART III--Validation of Evidence on Resources Specifications

SUMMARY

Evidence of Cost Items	Availability of Evidence	
	YES	NO
1. Information on start-up costs for replication	☒	☐
2. Information on operational costs for replication	☒	☐
3. Information on management costs for replication	☒	☐
4. Information on per learner start-up costs	☒	☐
5. Information on per learner operational costs	☒	☐
6. Information on per learner management costs	☒	☐

PART IV--Validation of Evidence of Exportability

DIRECTIONS FOR RATING

1. Examine and verify the evidence provided for each item reported in the Application for Validation, Part IV, Exportability.

2. Report in the space provided HOW you validated the evidence presented and the FINDINGS of the Validation. DO NOT repeat the evidence presented by the project unless new evidence, not reported in the Application for Validation, is used.

3. a. Circle the appropriate number. Assign a point value of "0" to any item for which the description is omitted.

   b. Assign a point value of "1" to any item for which the description is inadequate.

   c. Assign a point value of "2" for any item for which the basic description is complete but more d-tailed information would be helpful.

   d. Assign a point value of "3" for any item for which the description is clear and adequately reflects information needed by potential adopters.

4. Record the rating value for each item on the Validation Summary Checklist (on Page 105) in the item cell keyed to the number of the item.

PART IV--Validation of Evidence on Exportability (cont.)

A validated practice is exportable if (1) it is feasible to communicate to other school districts and (2) it can be adopted or adapted by other school districts with similar needs and environments. Used interchangeably with Portable, Replicable, and Communicable.

1. Examine and verify the description and documentation of the local educational need for this project by other districts.

Validation of Evidence:

Extensive examination of materials that report needs description document a local need for the project. On-site interviews with project personnel, school officials, and parents verify the same. Documentations are included for each of the four objectives of IRIS. These same needs are evident in other parishes or school districts with similar environments. All phases of need descriptions and documentation of exportability for this project to other parishes or school districts have been examined and verified.

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence on Exportability (cont.)

2. Examine and verify the evidence that the learner elements will be continued with State or local funds after the termination of Federal funds.

Validation of Evidence:

A letter of assurance from the Superintendent of Education verifies that the project will be continued after the termination of Project Title III funds. On-site interviews with various school officials revealed the same commitment. Also, Title I will involve 26 of the 52 Rapides Parish schools reaching 4,500 students with all aspects of the program next year.

Rating of Evidence:

0 1 2 [✓ 3]

90A

RAPIDES PARISH SCHOOL BOARD
P. O. BOX 1230
ALEXANDRIA, LOUISIANA 71301

J. I. BARRON, JR.
PRESIDENT

ALLEN NICHOLS
SUPERINTENDENT

April 4, 1975

Dr. Dan K. Lewis
Director, Experimental Programs
State Department of Education
Baton Rouge, Louisiana 70804

Dear Dr. Lewis:

This is to inform you that the Rapides Parish School Board plans to continue the Individualized Reading Instruction for Students Project upon the phasing out of Title III funding.

We will be pleased to provide a demonstration site for any who wish to see the program in action.

Sincerely,

Allen Nichols

Allen Nichols, Superintendent

AN/lb

PART IV--Validation of Evidence of Exportability (cont.)

3. Examine and verify the evidence that if the project is validated and funded for dissemination the Board of Education will operate the project as a demonstration site, assuming funds are made available for demonstration purposes.

Validation of Evidence:

The Rapides Parish Board of Education has agreed that the Title III IRIS project will be maintained as a demonstration site to disseminate the program during the 1975-76 school session if dissemination funds are available. The Superintendent's letter also verifies this proposed activity.

A summary of the proposed activities (Awareness, Involvement and Commitment Levels) for the IRIS role as a demonstration site have been verified and on-site interviews with those mentioned have confirmed the activities.

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence of Exportability (cont.)

4. Examine and verify the description of the target population (e.g., age, ethnic composition, income level, teacher experience, family, urban/rural).

The described target population was verified by examining offical school reports, computer print-outs, and on-site interviews with appropriate officials. Beyond the description of the target population given in this section of the Application for Validation, additional information has been obtained from the Director's records and the Continuation Application (page 22).

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence of Exportability (cont.)

5. Examine and verify the description of the learner involvement in the program you feel necessary for an adopter to obtain similar results.

Validation of Evidence:

Observations throughout the on-site visitations add additional verification to the accuracy of the description of the learner involvement which would be critical to the success of the adopter in obtaining similar results. Evidence presented for this item was verified by verbal reports made to the validators by the project director, reading coordinator, principals, teacher participants, and others.

Corrections:

In the Application for Validation, learner involvement should be designated for Grades 2 - 4 and Grades 5 - 10 instead of Grades 2, 3 and 4 - 10 (Application for Validation, Pages 148, 149).

Staff development requirements will be a minimum of 12 (instead of 6) hours initial in-service and two 4-hour (instead of 2 hour) sessions during the school year (Application for Validation, Page 150).

Rating of Evidence:

0 1 [✓ 2] 3

PART IV-- Validation of Evidence of Exportability (cont.)

6. Examine and verify the institutional variables (e.g., the school administration, teaching staff, physical facilities) described as critical to the success of the project.

Validation of Evidence:

The project staff reports that the institutional variables of administration and teaching staff are strongly supportive in the IRIS project and are closely correlated with the success of the project. It appears that the exportability of the IRIS program is not directly dependent upon variables such as physical facilities or organizational arrangements. Flexibility and willingness on the part of the teacher, however, do appear to be essential factors. The descriptions of the institutional variables as described in the Application for Validation were observed by validation team members to be accurate.

Addition to page 151, Application for Validation:

On the basis of a twelve teacher unit (300 students) the coordination requirement is estimated to be the equivalent of a half-time supervisor.

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence on Exportability (cont.)

7. Examine and verify the descriptions of any community and home variables described as critical to the success of the project (e.g., the necessity for parental and community involvement, etc.)

Validation of Evidence:

This information was verified by examination of project records, minutes of the regular meetings of the ESEA Advisory Committee, interview with a member of the Advisory Committee, and interviews with project personnel.

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence on Exportability (cont.)

8. Examine and verify the description of the activities critical to the success of the project. These should be the project elements of the program which would have to be installed in another district in order to recognize the program as an adoption. If the project can also be adopted in part based on the separate objectives, verify the responses by objective. Examine the pros and cons of partial adoption vs. full adoption of the program.

Validation of Evidence:

The elements critical to the success of the project have been examined and verified. They are:

Option I - Essential Project Elements for adoption of the Total IRIS Reading Management System with a school district having a computer.

Option II - Essential Project Elements for adoption of the Total IRIS Reading Management System with a school district renting or contracting computer services.

Option III - Essential Project Elements for adoption of the Total IRIS Reading Management System with a school district not using computer service.

Option IV - Essential Project Elements for adoption of the Total IRIS Reading Management System with a school district adopting only the testing service.*

* (NOTE: School districts utilizing this option will find it lacking in several essential elements of the full IRIS Reading Management System.)

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence on Exportability (cont.)

9. Examine and verify the description of the essential materials (software) used by students, teachers, and others and the source and cost of items. Verify the availability of the materials in terms of the previously determined critical program elements.

Validation of Evidence:

The materials essential to the success of the project have been examined and verified.

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence on Exportability (cont.)

10. Examine and verify the description of the types, numbers and qualifications of personnel required to operate the project successfully in terms of what another district will need to adopt the program.

NOTE; This Item #10 was presented by O.F. as Item #11 in the Application for Validation.

Validation of Evidence:

The numbers and qualifications of personnel required to operate the project successfully in another parish or school district have been examined and modified through on-site interviews with project staff and Validation personnel.

For the adoption and implementation of Options I, II, and III, it is estimated that program adoption and implementation will require one half-time coordinator for each twelve teachers. For some school systems this may involve an additional expenditure; for other districts that may not be necessary. (See Page 163, Application for Validation)

For Option IV, it is estimated that program adoption and implementation will require one quarter-time coordinator for each twelve teachers. (See Page 163, Application for Validation)

Rating of Evidence:

0 1 [✓ 2] 3

PART IV--Validation of Evidence on Exportability (cont.)

11. Examine and verify the description of the procedures and materials necessary for personnel training and technical assistance required for installation of the program in another setting.

NOTE: This Item #11 was presented by O.E. as Item #12 in the Application for Validation.

Validation of Evidence:

Procedures and materials necessary for staff development were verified by examination of instruments used in the training of teachers and aids. Specific factors cited in this section have been validated through an examination of the materials, through classroom observation, through teacher interviews, and through the examination of certain project records.

Initial in-service training for adoption will extend through two days (six hours each) instead of one day. (See Pages 165-167 of the Application for Validation)

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence on Exportability (cont.)

12. Examine and verify the description of any special equipment (hardware) and/or unique facilities required by the project for adoption and its use by elements.

NOTE: This Item #12 was presented by O.E. as Item #10 in the Application for Validation.

Validation of Evidence:

The project was observed in operation in a number of kinds of environments and under differing teaching-learning methods. It does not appear that special facilities are required; however, there is some need for some readily accessible hardware such as cassette recorders, slide projectors, controlled readers, and overhead projectors.

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence on Exportability (cont.)

13. Examine and verify the description of special problems characteristic of its type encountered in implementing this project. Describe successful solutions to such problems which the project staff would recommend to an adopting district based upon their experience in the project.

Validation of Evidence:

Exportability may be enhanced by the identification of problems that might be encountered with thorough descriptions of suggested solutions. Adopting parishes or school systems will benefit from having access to documentation of the systematic decision making approach to problem solving. The special problems identified in the Application for Validation have been evident throughout the Validation procedure. All of the problems have been discussed in-depth with project staff and observed on-site by Validation team members. During the Validation review, verification of additional implementation problems were verified through interviews with project personnel including the evaluators.

Rating of Evidence:

0 1 2 [✓ 3]

PART IV--Validation of Evidence of Exportability (cont.)

14. If the effectiveness review has eliminated objectives from validation, is the remaining portion a needed and viable program for dissemination?

NOTE: If none of the objectives have been eliminated write N/A.

N/A

1 2 3 [✓ N/A]

PART IV--Validation of Evidence of Exportability (cont.)

15. Is the total program important and viable for dissemination? If one or more objectives have been eliminated write N/A.

Yes.

Importance/Need:

The Rapides Parish has established the need for the IRIS program through several need assessments. These same needs are indicated in other parishes or school districts through state and parish assessments. The expressions of interest and inquiries from Superintendants, principals, and educators substantiate the evidence of need. They also give evidence of anticipated requests for the program in other parishes of the state of Louisiana and other states in the United States.

VIABILITY FOR DISSEMINATION

The factors which may determine the viability of the dissemination are:

1. Articulation of the Program: The rationale for the selection of the components is contained in the Application for Validation, the Teacher's Manual, and the Project Application.

2. Adequacy and Availability of Materials: The IRIS project is constructed around a Retrieval Manual Kit. The following components are included: diagnostic tests, with acceptable standards for successful performance for each subtest; graded Materials Retrieval Manuals, including performance objectives and rated levels of materials; criterion tests, that will evaluate the deficiencies; and monitoring forms, which include wall charts and individual prescrition forms to evaluate the success of educational materials used in treatment of specific reading skills deficiencies.

3. Cost of Adoption and Educational Gains to be Anticipated: The cost of adopting this program is primarily that of staff training and units of intervention (Twelve IRIS Labs for twelve teachers serving 300 students in Grades 2 - 10, three (3) hours per week for 180 days). No additional teaching personnel would be required. Limited operational costs are required for the IRIS Reading Management System. The program appears to be workable in a conventional school situation with little additional costs for the design of the instructional program such that individual needs may be met with only minor changes in the traditional classroom situation.

4. Training and Follow-up Consultation: Teachers involved in the project replication would participate in two days of in-service (six hours each day) where they would learn to use the IRIS Reading Kit and improve competencies in various phases of reading and individualizing instruction. This could be done in workshops with a consultant or with a course taught by University personnel. Follow-up consultation is a very important phase of any new program and should be included in the implementation plan.

5. Complexity of Program: The program has been designed as a computer-managed system. The Data Processing sets up data banks of student information, makes print outs of individual student progress reports, provides basis for treatment of specific reading deficiencies and records individual student prescriptions for instruction. This is not a simple program. It requires effective and competent teachers and administrators. Careful consideration should be given to all components in planning replication of the program.

1 2 [✓ 3] N/A

PART IV--Validation of Evidence of Exportability (cont.)

SUMMARY RATING

Record the rating value for each item on pages 88-103 keyed to the item call below.

Evidence of Exportability Items	Rating Points
*1. Description of Learner Needs	3
*2. Continuation of Learner Elements with State or Local funds	3
*3. Willingness to Serve as a Demonstration Site if funded for dissemination	3
4. Description of Target Population	3
5. Description of Learner Involvement	2
6. Description of Institutional Variables	3
7. Description of Community and Home Variables	3
*8. Description of Activities Critical to Success of the Project	3
9. Availability of Essential Materials (Software)	3
10. Qualifications of Personnel	2
11. Materials and Procedures for Training	3
12. Description of Essential Equipment (Hardware) or Unique Facilities	3
13. Description of Problems and Solutions	3
*14. Effectiveness/Success	N/A
*15. Exportability review	3

SUMMED RATING POINTS
(Summed Rating Points Must Total 38 for Vaidation) 40

Transfer rating to p. 105

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* Items 1, 2, 3, 8, 14 or 15 must each receive a rating of 3 points. If any one of these items does not receive a rating of 3 points, reject the project from further validation.

VALIDATION SUMMARY CHECKLIST

	Acceptable	Unacceptable
Validation of Evidence on Effectiveness/Success	☒	☐
Validation of Evidnece on Exportability	☒	☐
Validation of Evidence on Resource Specifications	☒	☐

VALIDATION REPORT

Directions: The Validation Report consists of nine sections.

Sections A through G are to be taken from Part I, Sections A through G of the Application for Validation after such information has been verified on site or corrected.

Section H contains (1) the conclusions and recommendations of the team members including minority reports.

(2) a statement of the innovativeness of the Project.

Section I requires six attachments of reports and certifications.

Section A

A. PROJECT INFORMATION

Area of concern Reading
(e.g., Career Education, Handicapped, Reading, etc.)

Project Title Individualized Reading Instruction for Students (IRIS)

Project Director's Name Walter B. Gatlin

P. O. Box 1230 Alexandria Louisiana 71301
Address City State Zip Code

Phone Number (include area code) (318) 442-8891

Application Agency Rapides Parish School Board

Location Sixth and Beauregard Streets
(Street Address)

Alexandria Louisiana 71301
City State Zip Code

Superintendent's Name E. A. Nichols

P. O. Box 1230 Alexandria Louisiana 71301
Address City State Zip Code

Phone Number (include area code) (318) 442-8891

Project Period: beginning 7-1-72 date; ending 6-30-75 date

Expenditures:

Grant Period			Federal Funds	Other Funds	Total Funds
7-1-72	to	6-30-73	$ 131,546.00	$	$
7-1-73	to	6-30-74	$ 120,860.73	$	$
7-1-74	to	6-30-75	$ 129,692.51	$	$
	to		$	$	$
	TOTAL		$ 382,099.24	$	$

Section B. BRIEF DESCRIPTION OF PROJECT:

Goals and Objectives:

The Individualized Reading Instruction for Students Project goals are:

(1) To develop a computer managed instructional program in selected areas of reading to facilitate the achievement of students in reading by providing approaches to reading that are varied, effective, and interesting.

(2) To provide a system of instruction utilizing materials and activities available to the teacher and to affect the role of the teachers in reading instruction.

The purpose of the IRIS project is to promote the personalization of reading instruction by providing thorough means of diagnosing needs with locally constructed graded diagnostic tests, locating materials for treatment with a computer-developed graded materials retrieval manual, evaluating achievements with locally constructed graded criterion referenced tests and monitoring progress of individual students, classes, and schools through periodic computer summaries. Educational prescriptions pertaining to known and identified reading problems are written according to individual student needs. These prescriptions will indicate methods of correction for simple and specific reading problems and will include materials and procedures to be used in treatment.

A major aim of "IRIS" is to provide personalized reading instruction whereby a student can compete with himself in reading achievement rather than with others. The project seeks to develop student self-direction in a learning environment which presents flexibility at each level of the learning process.

The program has been completely systematized around performance objectives. There have been extensive objectives governing the management phase, the developmental phase, and the implementation phase. In this the third year of the project, where implementation has occurred, the project is built around these four product objectives:

(1) Students in grades 3, 4, 7, and 9 who participate in the IRIS program will score significantly higher (.05 level) in selected reading skills and competencies than will non-participants when measured by the following locally constructed tests:

Diagnostic Test, Phonic Analysis, Level I
Diagnostic Test, Phonic Analysis, Level II
Diagnostic Test, Structural Analysis

(2) Students in grades 3, 4, 7, and 9 who participate in the IRIS program will demonstrate a significantly greater (.05 level) gain in attitude toward selected reading concepts than control group students as measured by the Semantic Differential.

(3) Teachers participating in the in-service education program for the IRIS project will demonstrate a significant gain (.05 level) in selected reading skills and knowledge as demonstrated by a pretest - posttest assessment using the Performance Competency Self Assessment for In-Service Education.

(4) Teachers participating in the IRIS program will show a significant increase (.05 level) in attitude toward use of the basic components of the IRIS Reading Kit as measured by the Teacher Appraisal of the IRIS Reading Kit.

Context:

Rapides Parish, located in the central part of Louisiana, has a population of approximately 118,078 of which 30,078 are school age children. Enrolled in its 52 public schools are 17,354 white children and 9,528 black children. There are 1,914 students enrolled in the four parochial schools. In four private schools - England Air Force Base, Alexandria Country Day School, Hope Baptist School and South Rapides Academy - there are 1,203 students enrolled. Three institutions of higher learning serve the parish. They are Louisiana State University at Alexandria; Northwestern State University, Natchitoches; and Louisiana College, Pineville.

The 1,369 square mile parish is separated by Red River with pine wooded hills on the north, and flat fertile farm land to the south.

Primary sources of income in the parish are derived from forestry, agriculture, industry, and retail business. The major industries now in the area are Dresser Industrial Valve and Instrument Division, and Pineville Kraft Corporation, Proctor and Gamble, and Parks Wood Products. The per capita income of the parish as recorded in 1970 was $2,609. Information from the Employment Security Department indicates an unemployment rate in the area of 8% to 12%.

The Rapides Parish School System is organized on a basic 6-2-4 system. Elementary Schools contain K-6, Junior High Schools contain grades 7-8, and Senior High Schools 9-12.

Students in the IRIS project are from both rural and urban areas. Involved in the project are students from grades 3, 4, 7, and 9, from all income levels and representative ethnic groups.

An assessment of needs survey conducted in the Spring of 1972 revealed the greatest educational need of students in the Rapides Parish School System to be in the area of reading. In assessing the needs of the system an analysis of needs was distributed to:

(1) Rapides Parish Public and Parochial School Board members

(2) ESEA Advisory Committee members

(3) Rapides Parish School Board administrative supervisory staff members

(4) Public and parochial school principals

(5) drop-outs enrolled in a work incentive class at the Rapides Parish Skill Center

Included in the assessment were random sampling of teachers in public and parochial schools, seniors in public and parochial schools, and parents whose children attend public and parochial schools.

Also included in the assessment of needs was a summary of attendance data showing increasing absences from the lower to upper grades.

Eighteen activities were included on the assessment form. The final ranking of activities showed reading to be the top priority with 5.385 rating. This priority rating clearly demonstrated that those surveyed felt reading to be the number one need for improvement in the parish school system. S.R.A. and I.T.E.D. achievement tests administered in the Rapides Parish School System in 1971-72 further revealed that 30% of all students in Rapides Parish grades 2 - 6 in Title I and non Title I schools scored below the 25th percentile ranking in reading achievement. The same survey also revealed that 26% of those students in grades 7 - 11 ranked below the 25th percentile in reading achievement.

A further review of reading scores from this survey showed that the overall parish system average in reading achievement was at approximately the 32nd percentile on the national norm scale. Locally developed reading diagnostic tests given to students in the Rapides Parish School System and other available reports and studies have documented the fact that many students in Rapides Parish Schools lack basic skills necessary to be competent readers.

Program Description:

Individualized Reading Instruction for Students (IRIS) is a computer-managed reading project based on diagnosis - prescription - treatment - post criterion-referenced testing. Data processing is utilized to assist teachers in the management of the reading program in the following ways:

(1) Set up data banks of student information

(2) Make available to teachers a wide variety of reading skills by coding, storing, and organizing descriptive information about small units of material

(3) Print out individual student progress reports

(4) Provide summary reports of effectiveness of instruction and instructional materials in treatment of specific reading deficiencies

(5) Prepare individual student prescriptions for instruction

The project was funded for a three year period from July 1, 1972 to June 30, 1975. The first and second year of the project was used for development and field testing of the various components of the project. The third year has been used for implementation of the project around a research design.

There are seven schools, five public and two parochial, participating in the project. Grades two through ten have been involved in the project development. Approximately 1,000 students have been involved in the development of the project over the past three years. Approximately 339 students are involved in the third year experimental phase with 196 in experimental groups and 143 in control groups. The distribution of the target population is as follows:

GRADE LEVEL	STUDENT PARTICIPANTS FOR ONE YEAR	STUDENT PARTICIPANTS FOR 2 OR MORE YEARS
3	31	
4	18	18
7	36	10
9	70	13
	TOTAL 155	TOTAL 41

The project has a staff of four persons - one full time director, one reading specialist and project coordinator, one secretary to the director, and a clerical aide. There are 7 principals, 25 teachers, and 7 teacher aides involved at the school and classroom level. Of the 25 teachers working in the project, teaching experience ranges from 3 to 34 years with 16 having their masters and above. All teachers hold a valid teaching certificate in their respective fields.

Consultants on the University level included Dr. Otis Cox* Director of Research at Northwestern State University of Lousiana; and Dr. Mildred Bailey* Director of Reading at Northwestern State University. Local consultants involved directly in the development of project materials included teachers working in the project at the classroom level and Mrs. Georgie Duncan, a retired teacher with the Rapides Parish School System. The project focus during the two years of development and field testing and the last year of implementation under the experimental design has been on students who were identified as reading below their actual reading grade placement on a standardized reading test. These students were diagnosed for specific skills deficiencies in Phonic and Structural Analysis with locally constructed graded diagnostic tests.

* Resumes are included in the appendix of the Application for Validation

Three diagnostic tests were constructed by the Title III staff and project teachers, two in Phonic Analysis (grades 2 - 4 and grades 5 - 10) and one in Structural Analysis (grades 4 - 10). These tests were submitted to statistical analysis in order to determine an estimate of their effectiveness. Each test was developed with an acceptable standard for successful performance for each subtest. This standard is essential for use of the test by the teacher to determine skills in which the student is deficient.

A period of treatment follows diagnosis. Educational prescriptions pertaining to known and identified reading problems of individual students are written. A computer based materials retrieval manual is used by teachers to develop these prescriptions. These graded materials retrieval manuals developed by the computer are more than just a teacher guide. They include:

(1) Complete performance objectives for the skills of reading

(2) Complete identification of numerous reading materials associated with each skill and exact location within the material

(3) Rated levels of materials

(4) Degree of involvement for teachers for each set of materials

(5) Sensory mode involved for instructional material

Thus the teacher is free of much detail and will become an organized manager of the learning laboratory. The teacher refers to the retrieval manual kit and selects materials for each skill that are most appropriate to particular learner needs.

An evaluation at the end of treatment is used for the purpose of determining whether the specific skills deficiencies have been corrected. Graded locally constructed criterion-referenced tests have been constructed in each skills area on three levels to evaluate the progress a student has made. An acceptable level has been established to determine whether the student has mastered the skills or needs to be recycled for additional treatment.

Monitoring forms are included in the lab to track skill growth of individual students or groups, for instructional planning, and for transmitting information to data processing. These include:

(1) Wall charts on Phonic and Structural Analysis for monitoring individual progress

(2) Individual prescription forms to evaluate and monitor success of educational materials used in treatment

Extensive in-service programs were initiated for Title III staff, teachers, aides, and principals to lend guidance in exposing them to new and innovative methods of instruction. Workshops were held in the areas of testing, evaluation, materials, and performance based individualized instruction. Through active experimentation with new media and techniques, teachers developed new skills and returned to their classrooms with fresh ideas about methods and materials to fit their own teaching situations.

The producer staff has completed the Vocabulary section of the IRIS lab and is field testing the components in Title III classroom situations during the spring semester of 1975. This section of the project will be incorporated into the IRIS reading management system in the 1975-76 school year.

The Vocabulary section has been constructed around the general format of the other sections of the IRIS project. This section is somewhat different, however, in that it has been designed basically for those students who are identified from prior reading achievement tests as reading on or above their actual grade placement. In selected cases it can be used in remedial instruction for those students identified as being below their actual reading grade placement in vocabulary or comprehension.

The Vocabulary diagnostic tests measure the degree to which students in grades 2 - 12 have mastered various vocabulary skills. They have been constructed at three levels:

(1) Vocabulary - Level I (Primary)
Reading Levels 2 - 4

(2) Vocabulary - Level II (Intermediate)
Reading Levels 5 - 8

(3) Vocabulary - Level III (Jr. High-Secondary)
Reading Levels 7 - 12

Costs of the Vocabulary section can be estimated by examining the cost of related components in the phonic and structural analysis sections.

The producer staff is presently defining areas of comprehension to be included in a fourth section of the IRIS lab, identifying specific skills within each area, and writing performance based objectives for instructional management. It is hoped by the producer staff that a continuation of development in comprehension will be possible so that this section might be added to the reading system making it more comprehensive and complete.

Costs:

For consideration of adoption of the IRIS Reading Management System the producer staff has developed four (4) options. Costs are estimated on the basis of twelve teachers serving 300 students.

Option I - Consumer district owns or has a computer in its present operations.

Total initial implementation Cost - $ 2,552.00
Per pupil implementation Cost - $ 8.51

Total ongoing maintenance Cost - $16,903.00
Per pupil ongoing maintenance Cost- $ 56.34

Option II - Consumer district rents or contracts computer services.

Total initial implementation Cost - $ 2,830.00
Per pupil implementation Cost - $ 10.43

Total ongoing maintenance Cost - $17,721.00
Per pupil maintenance Cost - $ 59.07

Option III - The consumer district does not use computer services for implementing the IRIS program.

Total initial implementation Cost - $ 2,456.28
Per pupil implementation Cost - $ 8.19

Total ongoing maintenance Cost - $16,731.00
Per pupil maintenance Cost - $ 55.77

Option IV - Consumer district adopts only the project developed diagnostic and criterion-referenced testing portion of the program.

Total initial implementation Cost - $1,487.24
Per pupil implementation Cost - $ 4.96

Total ongoing maintenance Cost - $4,281.00
Per pupil maintenance Cost - $ 14.27

C. EVIDENCE OF EFFECTIVENESS:

The evaluation of the project was conducted by Dr. Otis Cox of Northwestern State University with the assistance of the IRIS staff. Data were analyzed with the use of an Olivetti Programma 101 programmed electronic calculator and with the services of the local computer, a Univac Model 9300.

The evaluation was conducted in terms of four objectives. These objectives concerned, in order:

1. Student achievement
2. Student attitude
3. Teacher competency
4. Teacher attitude

The samples of students used to conduct the study included 339 students. Of these, 196 were enrolled in the experimental groups while 143 were enrolled in the control group. All of the eighteen teachers who participated in the in-service program comprised the sample for the study of teacher change.

The results were statistically analyzed for each of the objectives. The summarized results of these analyses follow:

Objective I: The differences in achievement groups were tested for statistical significance using analysis of covariance procedures. The experimental and control groups were matched on selected variables. The pretest scores were used as the covariate in the analysis of covariance procedures. In all three areas tested (Structural Analysis, Phonic Analysis, Level I, and Phonic Analysis, Level II), statistically significant differences were obtained. In all cases an analysis of the adjusted mean scores revealed that each of the experimental groups scored higher than the control group. Multiple comparisons as well as supplementary statistical analyses are reported under Objective I in Part II of this report.

Objective II: An assessment of the attitudes of the experimental and control students was obtained by use of the semantic differential. A total of seventeen separate reading concepts were rated by each student in a pretest, posttest design. Pretest scores were subtracted from posttest scores and the differences (or amount of gain/loss) in attitude scores were used to test for significance. Analysis of the total gain/loss showed statistical significance relative to the experimental students. Experimental students made a substantial mean gain in attitude score while the control group students showed a mean loss in attitude toward reading concepts. A supplementary analysis by the separate reading concepts is also provided for further evaluation.

Objective III: The in-service program was designed to improve teachers' skills and knowledge competencies in a wide variety of approaches to reading. The teachers were assessed before the in-service program and upon completion of the activities. The gain in skill/knowledge from pre to post assessment was tested for statistical significance using the chi-square technique. The results for each area of skills/knowledge were significant. The gains that were sought by the staff through the in-service program were achieved.

Objective IV: One of the desired results of the program was to have the teachers become more favorably disposed toward using the instructional kit. The teachers were assessed, pre and post, using a rating scale for each of the three (3) basic components of the kit, the diagnostic tests, the retrieval manual, and the criterion-referenced tests. The Friedman two-way analysis of variance of Ranks technique was used to test significance. The results of all three (3) tests showed significance at the .001 level indicating teacher attitude change in the desired direction.

The changes described above are attributed to the program activities. The student achievement and gains are meaningful in terms of control group comparisons.

Teacher gains are attributed to the program activities. Pre - post assessment identified that the change occurred during the time of the program. If these teachers had continued in the regular program, they would not have been exposed to the training program that comprised the in-service course. Also, only by working with materials could they have gained insight into the value of these materials to the classroom teacher.

Section D

D. Resource Specifications

Summarize the information obtained as a result of the varification of the start-up, operations and management resources.

For consideration of adoption of the IRIS Reading Management System, the producer staff has developed four (4) options. A resource specifications section has been provided for each option. The unit of intervention used by the producer in developing resource specifications is 12 IRIS Labs, 12 teachers serving 300 students, three hours a day for 180 days.

Option I - The consumer district owns or has a computer in its present operations. The start-up cost including in-service training for 12 teachers, 12 sets of project materials for 12 teachers serving 300 students, data processing materials and services, and consultant services totals $2,552.00 or $8.51 per student. The management cost including materials and services for monitoring the reading system totals $3,600.00 or $12.00 per student. Operational cost totals $13,303.00 or $44.34 per student.

Option II - The consumer district rents a computer or contracts computer services. This start-up cost including in-service training for 12 teachers, 12 sets of project materials for 12 teachers serving 300 students, data processing contracted services, and consultant services totals $2,830.00 or $10.43 per student. The management costs total $4,350.00 or $14.50 per student. Operational cost totals $13,371.00 or $44.57 per student.

Option III - The consumer district does not use computer services for implementing the IRIS Reading System. The basic differences involved are commercial printing of existing materials retrieval manuals and consumer district's development of a monitoring system for the program.

Start-up cost including in-service training for 12 teachers, 12 sets of project materials for 12 teachers serving 300 students, and consultant services totals $2,456.28 or $8.19 per student. The management costs total $3,600.00 or $12.00 per student. Operational cost totals $13,131.00 or $43.77 per student.

Option IV - The consumer district adopts only the project developed diagnostic and criterion-referenced testing portion of the program. Start-up cost including in-service training for 12 teachers, 12 sets of project developed diagnostic and criterion-referenced tests, and consultant services total $1,487.24 or $4.96 per student. The management cost totals $1,875.00 or $6.25 per student. Operational cost totals $2,406.00 or $8.02 per student.

The afore mentioned information provided reflects the cost factors involved for adopter schools depending upon the sophistication and/or financial limitation of the school district. The Options for adoption are so designed as to not prohibit any school district for the utilization of the philosophy and/or practices as specified throughout the project.

Section E

E. Project Exportability

Summarize step-by step the processess that would be involved in adoption of the project by other school districts, including information about materials, equipment, staff training.

The highly exportable nature of Project: IRIS is underscored by the universal need for enhanced reading achievement. A Louisiana state needs assessment as well as the Rapides Parish survey of educational need identifies reading as the top priority among the most critical areas of curriculum concern in Louisiana. Further evidence of the exportability of Project: IRIS is indicated by the numerous requests for project developed material from school districts across the state and in other states.

The Rapides Parish School Board plans to continue the IRIS Reading Management System in the parish after federal funding is ended and agrees to operate a project demonstration site. Title I is adopting the IRIS program for the next school year. It will be implemented in 26 of the 52 schools and will reach 4,500 students.

Most potential consumer school districts will probably have the personnel and physical facilities necessary to replicate the IRIS Reading Management System. It is recommended, however, that a half-time coordinator from the adopting school district be responsible for administering the project with each twelve teachers. Likewise the support of one classroom aide for each three or four teachers appears to be needed. The program can be used with any existing school organization and is compatible with self-contained classroom situation as well as reading laboratory settings.

The project staff has developed the IRIS project around four (4) options for consideration of consumer school districts in adopting the IRIS Reading Management System. They are as follows:

Option I - This adoption will be for those school districts owning or having a computer as part of their existing programs. All phases of the reading management system are included.

(1) In-service training for all personnel involved in the program

(2) Project developed graded diagnostic tests to identify reading skill deficiencies

(3) Project developed graded criterion-referenced tests to evaluate students after treatment

(4) Materials retrieval manuals to select materials for skills that are the most appropriate to particular learner needs

(5) a monitoring system to provide valuable information about individual students and allow the teacher to become an organized manager of the reading program in the classroom

(6) Data Processing object programs, instructions, and data tapes to develop and manage the reading system

Option II - The basic difference between option I and option II is that the consumer district in option II does not have a computer and must rent a computer, or contract data processing operations.

Option III - This option allows the consumer district to adopt the reading management system without the use of a computer. The basic difference in this option is that the consumer uses a commercial reprinting of the existing materials retrieval manuals and the consumer district must develop and maintain the monitoring system of the program for management purposes. All components of the project otherwise are the same.

Option IV - This option involves a school district adopting only the project developed graded diagnostic and criterion-referenced testing components and associated forms. The Validation Team does not recommend this option since so many of the essential elements of the program will be eliminated in the use of only testing components.

All costs of every component of each option are included in the exportability section.

Section F

F. Publications and Materials

If locally developed publications are available for dissemination, give title, description, and cost.

Title	Description	Cost
Preparation of Behavioral Objectives	Booklet defining behavioral objectives and practice exercises in writing objectives	$ .25 per copy
Instructional Manual for "IRIS" Lab	Gives detailed explanation of components of Lab and use of each	$ 3.98 per copy
Phonic Analysis Manual of Instructions - Level I	Gives instructions for administration of Phonic Test with validity and reliability statistics	$ 4.31 per copy
Phonic Analysis Manual of Instructions - Level II	Same	$ 4.31 per copy
Structural Analysis Manual of Instructions	Gives instructions for administration of Structural test with validity and reliability scores	$ 4.31 per copy
Phonic Analysis - Diagnostic Test - Level I	Student test to diagnose deficiencies in Phonics Grades 2 - 4	.22 per copy
Phonic Analysis - Diagnostic Test - Level II	Student test to diagnose deficiencies in Phonics Grades 5 - 10	.22 per copy
Structural Analysis - Diagnostic test	Student test to diagnose deficiencies in Structural Analysis - Grades 4 - 10	$ .19 per copy

Title	Description	Cost
Phonic Analysis Criterion-referenced test - Level I Grade Level 2 - 4	24 tests (Pads of 25) Teacher score sheets Dividers	$ 17.75 per set
Phonic Analysis Criterion-referenced tests - Level II Grade level 5 - 6	20 sets (Pads of 25) Teacher score sheets Dividers	$ 17.63 per set
Phonic Analysis Criterion-referenced tests - Level III Grade levels 7 - 12	20 sets (Pads of 25) Teacher score sheets Dividers	$ 17.63 per set
Structural Analysis Criterion-referenced tests Level I Grade level 2 - 4	14 tests (Pads of 25) Teacher score sheets Dividers	$ 11.98 per set
Structural Analysis Criterion-referenced tests Level II Grade level 5 - 6	14 tests (Pads of 25) Teacher score sheets Dividers	$ 11.98 per set
Structural Analysis Criterion-referenced tests Level III Grade level 7 - 12	14 tests (Pads of 25) Teacher score sheets Dividers	$ 11.98 per set
Individual Prescription forms	Forms to write individual student prescriptions for treatment of identified phonetic and structural skills deficiencies Information includes: performance objective date of treatment materials location teacher evaluation of of material criterion referenced test taken after treatment degree of success on criterion test (Pads of 50)	$ .48 per pad
Object programs and Instructions for Computer	Computer programs for IRIS Reading System	$115.00

Title	Description	Cost
Data Tape	Rapides Parish materials retrieval manuals	$115.00
Monitoring Reports	Summaries of student achievement, materials evaluation classes, schools, etc.	Part of computer programs
Phonic Analysis Progress Chart	To track student deficiencies in Phonic skills from diagnostic tests and recording evaluation after criterion testing.	$ .90 per chart
Structural Analysis Progress Chart	To track student deficiencies in Structural skills from diagnostic tests and recording evaluation after criterion testing.	$ .65 per chart
Materials Retrieval Manual (Phonic and Structural) Level I - Grades K-4 Level II - Grades 3-6 Level III - Grades 6-12	Computer designed manuals for location of reading materials to treat specific and identified phonic and structural reading deficiencies. Information is cataloged by: objective location degree of teacher participation media sensory mode, etc.	(1) Districts with computer $15.00 per 3 levels* (2) Districts renting or contracting a computer $90.00 per 3 levels* (3) Commercial reprinting of existing manuals $126.73 per 3 levels

* after initial printing

Section G

G. Unanticipated Outcomes and Spinoff Findings

The implementation of IRIS Reading Management System produced several bonus developments:

1. One unanticipated outcome has been the immediate interest in the program materials exhibited by school systems in Louisiana as well as throughout the nation.
2. Materials assessment is for the purpose of monitoring materials, purchasing materials, utilizing materials, and providing capabilities for relating specific types of material to specific characteristics of children.
3. The structure of the process objectives provides the potential for the total education system of management by objectives (accountability).
4. The program, through the development process, has moved the staff toward an organizational pattern focusing on individualized education.
5. The staff development provided training for the supervisory and instructional staff to technically develop prescriptions for the learner needs.
6. The process has potential of identifying specific needs and progress in curriculum areas for utilization of reporting to parents.
7. A sense of accomplishment among teachers, students, and parents resulting from immediate feedback of data is apparent.
8. The potential use of the computer management system lends itself to other curricula disciplines such as, math, science, etc.
9. It broadens the basis of the Language Arts Curricula at the secondary level.
10. The project focuses on immediate success of youngsters at all learning levels. Therefore, it enhances educational climate within the classroom.
11. The program provided potential for the evaluation or self-evaluation of personnel based on Performance Objectives.

Section H

1. Conclusions and recommendations of team members including minority report (attach additional sheets as needed):

RECOMMENDATIONS:

1. Continuation to refine and reevaluate the various components of the project.
2. Developmental continuation into the areas of vocabulary and comprehension.
3. Expansion of the process of this project to other areas of the curriculum for consideration in the future.
4. Validation Team unanimously recommends Validation of the project for dissemination statewide, regionally, and nationally.

CONCLUDING REMARKS:

The Validation Team has analyzed the total project. We find it a sound innovative approach to the teaching of reading, and we recommend the U. S. Office of Education pursue the potential of the project through dissemination nationally.

2. Innovativeness of the project.

Innovativeness of the project (IRIS) is reflected in the following:

1. The computer management aspect
2. The design, the development, and the potential of the Materials Retrieval Manual
3. Comprehensive monitoring system
4. Prescriptive treatment for identified learner's needs
5. Management by objectives of the classroom process

Innovativeness is reflected in a practical management procedure for diagnosing, planning, implementing, and evaluating relative to learning outcomes and instructional processes.

Section I

Six attachments make up Section I:

1. A copy of the on-site validation form with the team's final rating.

2. Copies of individual team members written reports which form the basis for the chairperson's summary report.

3. Certification by team members that the reports and accompanying documents are accurate and valid and that the project has been validated. (See sample form on p. 117)

4. Certification by the superintendent of the local education agency that the project will be continued and the conditions of the continuation. (See sample form on p. 116)

*5. Certification by the Chief State School Officer that the team ratings and comments have been reviewed and found to be accurate and complete. (See sample form on p. 117)

*6. State education agency checklist. (See p. 118)

* These items are added to the final team report by the SEA.

CERTIFICATION BY VALIDATION TEAM (I3)

Name of Project Individualized Reading Instruction for Students

School District Rapides Parish School Board

Address P. O. Box 1230
Alexandria, Louisiana 71301

We hereby certify that the above cited project

X is certified as being validated

___ is not certified as being validated

Date May 16, 1975

Signature of Validation Team:	Address and telephone number:
(1) Alice L. Hammons (Chairman)	Box 352 Bardstown, Ky. 40004 (502) 348-9087
(2) Donald S. Van Fleet	1054 Kimbel Dr. Frankfort, Ky. 40601 (502) 695-3625
(3) Marie Sinclair	25-L Northwood Lake Northport, Alabama (205) 339-2989
(4) Katharine G. Stone	P. O. Box 576 Jacksonville, Alabama 36265 (205) 435-7156
(5) John W. Schaum	1907 Bella Vista Dr. Chattanooga, Tennessee 37421 (615) 821-2513 or 894-1420

Comments:

CERTIFICATION BY SCHOOL SUPERINTENDENT (I4)

Name of Project: Individualized Reading Instruction for Students

School District: Rapides Parish School Board

Address: P. O. Box 1230 Alexandria, Louisiana 71301

I hereby certify that the above cited project, which is under my administration, will, if validated, and if State or other funds are available, serve as a State or National demonstration site for a period of at least one calendar year from the date of notification of such selection.

Superintendent of School District

May 16, 1973
Date

CERTIFICATION BY CHIEF STATE SCHOOL OFFICER (I5)

I hereby certify that:

1. Project: Individual Reading Instruction for Students
(Title)

in the Rapides Parish Schools was visited on May 14-17, 1975
(name of local education agency) (date)

by a team of five (5) experienced and trained validators.
(No. of team members)

2. The team consisted of:

Dr. Abe Hammons (Name)	Kentucky (State)
Dr. Donald Van Fleet (Name)	Kentucky (State)
Dr. John Schaerer (Name)	Tennessee (State)
Dr. Marie Sinclair (Name)	Alabama (State)
Dr. Katherine Stone (Name)	Alabama (State)

3. I have examined the team's final report, and based on the data reported, I am satisfied that the project meets all the criteria of exemplariness and is hereby declared validated.

(Chief State School Officer)

5-22-75
Date

STATE EDUCATION AGENCY CHECKLIST (I6)

Name of Project Individual Reading Instruction for Students
State Louisiana

The following checklist will be used to alert appropriate officials of any possible problems which might affect the project being disseminated. State education agencies may wish to review the items in the checklist when they consider projects for nomination for validation. The questions should be answered in terms of the project.

YES	NO	
X		Is the title of the project included?
X		Is the name, address and phone number of the Project Director included?
X		Is the name of the local superintendent included?
X		Is there a statement of the LEA's commitment to continue the project as a demonstration site?
X		Is the project period and funding information complete?
X		Is the target population identified?
X		Are the project objectives clearly and succinctly stated?
X		Are the activities designed to achieve each objective clearly stated?
X		Are the evaluation strategy and the evaluation findings clearly stated?
X		Are the evaluation findings statistically and educationally significant?
X		Does the project meet the criterion for exportability?
X		Does the project meet the criterion for effectiveness/success?
X		Does the project meet the criterion for resource specifications?
X		Does the project have evidence of LEA commitment?
X		Did the validating team contain the minimum number of three (3) experts?
X		Did the State Advisory Council recommend the project for consideration?
X		Does the project conform to Federal Regulations?
	X	Are there any fiscal audit problems pending?
	X	Is there any organized negative community reaction to the project?
	X	Are any civil rights or other legal matters pending?
	X	Is more than half (over 50%) of the cost of the project contracted?
X		If there are nonpublic school children living in the project area having similar needs are they included in the project?

GPO 886-476

Signed by Appropriate Official for Nominating State